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Paget's Disease of the Bones (Osteitis Deformans)

With Report of Seven Cases

HYMAN I. GOLDSTEIN, M.D.

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Camden, N. J.

Osteitis deformans, Paget's disease, hypertrophic chronic osteomalacia or fibrous megalosteitis is a condition of unknown etiology, effecting the bones, chiefly the skull, tibia, and femur and characterized by minor subjective symptoms and deformities of the skull and long bones. It is a progressive chronic incurable disease, which may be due to some disturbance in metabolism and the endocrines.

Sir James Paget in 1876 first reported this condition before the Royal Medical and Chirurgical Society of London with two cases of his own and three other cases. He saw his first case in 1856. Wilk's (1869) case was probably the first that came to autopsy. Wrany in 1867 described a case of the disease, while Czerny in 1873 used the term osteitis deformans in reporting a case. Malpighi in 1697 spoke of a condition (of diffuse hypertrophy of the skull) which Virchow later called "leontiasis ossa" and which is probably a form of osteitis deformans.

Diagnosis.

The diagnosis can best be made by the roentgenologist. Of course, cases that are fairly well developed are quite easy of diagnosis. The typical appearance of the peculiarly shaped skull, the small face, the bowed legs, etc., when once seen, are unmistakable. The diagnosis must be made chiefly from syphilitic and sarcomatous disease of the bones, acromegaly, rickets, hyperostosis diffusa cranii, osteitis fibrosa cystica, osteomalacia, hydrocephalus, generalized osteochondromata, and other allied conditions. Leontiasis ossium and osteitis fibrosa or von Recklinghausen's disease, are considered by some authors to be similar or identical in nature to Paget's disease.

Before deformities have appeared it is almost impossible to make a correct diagnosis clinically. The roentgenographic reports in the early stages are most important, and of great value.

Virchow's Disease (leontiasis ossium or hyperostosis diffusa cranii) is probably a form of osteitis deformans.

Osteomalacia involves the bones of the trunk more frequently than the extremities and usually the skull is not involved. The bones of the pelvis and the lumbar spine are particularly affected. Bone hypertrophy is absent. Finally, it rarely affects the male.

Osteitis deformans is more common in the male, and frequently involves the skull, femurs and tibias. There is marked bone hypertrophy, chiefly on the convex side. In rickets (Lovett) the thickening of the cortex occurs on the concave side. Lewin draws attention to the fact that when a person with Paget's disease grows smaller, he is small all day long, but in osteomalacia (as in Elliott and Nadler's case, 1917) there is a diurnal cycle—during the day the osteomalacia patient is shorter in height than during the night. Body weight (due to the softening of the bones) decreases the patient's height, by compression of the intervertebral discs during the day.

Prognosis.

The disease does not shorten life. In Moizard and Bourge's case the condition existed 52 years before death. Stilling's patient was 92 years old. The condition is incurable.

Treatment.

Arsenic, calcium salts, thymus gland, parathyroid and pituitary gland therapy, phosphorus 1-100 t.i.d., and operations of various kinds have all been tried.

Roentgenographic findings in cases of Paget's disease are typical. Rarefying osteitis with thick cortex due to subperiosteal and medullary new bone formation (convex surface shows thickening). Morpheo-scleroderma may occur as in Lewin's third case and in Pernet's case. The patient has a large head, a prognathian chin, and unusually long arms. Deformities occur in the long bones—chiefly the outward and forward bowing of the tibia and at times the femur. Sometimes the femur is the first bone affected. Cervico-dorsal kyphosis may be present. The patient usually complains of "rheumatic" pains. The extremities become weak and tender. The patient

complains of "shrinkink" in height and notices that a larger hat is necessary. As the head increases in size, the face appears small.

Lewin (Jan., 1922) in the *Journal of Bone and Joint Surgery* reports three cases of osteitis deformans and briefly reviews the literature referring to Paget's, Da Costa's, Hurwitz's, and Packard's papers on the subject, and quotes Czerny, Funk and Morton Prince. Lewin's cases occurred in a man, aged 47 years; a female (no data given), and a negress, aged 69 years. His notes in the first and second cases are certainly very incomplete and cannot be accepted without some doubt as to their true nature.

De Massary and Lechelle (*Bull. de la Societe Medicale des Hopitaux, Paris, Jan. 30, 1920, 44, No. 4, page 134*) reported a case of Paget's disease restricted to one femur and developed at the age of 45.

Babonneix, Dancyelle and Perisson (*Bull. de la Societe Medicale des Hopitaux, Paris, Dec. 2, 1921, 45, No. 35, page 1579*) report a case of Paget's disease in an aged woman. The clinical picture is somewhat incomplete and was of syphilitic origin, "as always," according to the authors.

Funk, Galliard, and also de Massary (above) describe a few cases of Paget's restricted to one femur or to one tibia, or the tibia and fibula in one leg. (Galliard: *Bull. de la Soc. Med. des. Hop., Paris, Dec. 2, 1921, 45, No. 35, p. 1583*.)

There are references to pulmonary and hyperthrophic osteoarthropathy in Index Catalogue (U. S. Army) Vol. XII, 1907, pages 250-252. References to reports and instances of osteitis deformans are listed on pages 248-258, 1907, in Index Catalogue, and in the issues of the *Index Medicus* from 1907-1922. There are many reports and articles on osteomalacia, osteopsathyrosis, osteosarcoma, osteochondrosarcoma, leontiasis ossium, acromegaly of localized and generalized types, and instances of osteitis fibrosa, cystica (von Recklinghausen's disease of the bones)—these cases must be separated from the true cases of Paget's disease of the bones. Friedrich Daniel von Recklinghausen in 1891 (*Festschr. Rudolf Virchow, Berlin*) reported on "Osteitis Deformans or Fibrosa Osteomalacia and Carcinoma of Bones." Stack (1900) reported a case of diffuse eontiasis ossea. Lanz (1900), Sattler (1900), Semprun (1902), Keen (1899), Baudon (1899), Bassoe, Apert and Bordet (1921), Sheehan (1920), reported instances of *eontiasis ossea*.

Pic (1897), Wollenberg (1904), Wilson (1902), C. G. Watson (1903), Weber (1899), Smith (1906), A. Watson (1894), Rodman (1903), Rehn (1904), Sommer (1903), Lidwill (1904), Guthrie (1893), Foote (1903), Daser (1905), Bandalin (1903), Bowlby (1889), Hudelo (1901), Jamieson (1897), Lunn (1887), Marie (1892), Parkinson (1897), Schmieden (1903), Shattuck (1903), Walsham (1883), Stettner (1921), and W. T. Watson (1898) and many others reported cases of *Paget's disease*. Vallery-Radot and Stevenin reported a case of Paget's disease with positive Bordet-Wasserman reaction. Romer, Hare and Bernard (1921) and a few others have reported cases of Paget's disease during the past two years. There are probably about two hundred and sixty (260) cases on record in the entire medical literature of the world, and with the nine (9) cases, I report in this paper, a total of 269 cases.

Instances of *Osteitis fibrosa* have been reported by Langenskiold (1921), Painter (1921), de Castro Freire (1921), Roth and Volkmann (1920), Bryan (1921), Bancroft (1921), Strom (1920), Floercken (1921), Naumann (1921), De Courcy (1919), Lake and Schus-

ter (1920), J. C. Bloodgood (1920), Beust (1920), Delahaye (1921), Mouchet (1921), and others.

Bauer's discussion on *osteopsathyrosis* and *osteogenesis imperfecta* (*Deutsche Ztschr. f. Chir., Lipsig, 1920*) was recently published, as were also the articles by Hanssen (1921) and Navarro and Sanchez (1921) on *osteopsathyrosis*.

Vander Veer and Dickinson (1921) and Burns (1921) reported cases of *fragilitas ossium*.

Myerding's paper on *osteomalacia* appeared in *Surgical Clinics of North America* (1921).

Young and Cooperman recently reported a case of osteitis fibrosa in a colored woman, aged 21 years. The patient had multiply cysts and giant-cell sarcomata. (*Ann. Surg., February, 1922, LXXV, No. 2; pages 171-180.*)

They review the literature and describe two types of the disease—a local and general type. They refer to cases reported by Da Costa and Funk, Percy, Rehn, Crile and Hill, Willard and Andrus and Barrie. They mention the fact that Silver in 1912 collected 97 cases, seventeen of which were of the general type. (Young and Cooperman's patient died at the Philadelphia General Hospital, June 8, 1922, and was autopsied.)

Higbee and Ellis reported (1910) a case of a man, aged 63 years, born in Philadelphia. Dr. Ellis performed the autopsy. They refer to Packard, Steele and Kirkbride's (1901) paper, in which they collected from the literature 66 cases of osteitis deformans and added their own case. Higbee and Ellis collected 158 cases. In Higbee and Ellis's case there was evidence of hypothyroidism. The thyroid gland was atrophied in the case reported by Hudelo and Heitz.

The joints are rarely involved in true osteitis deformans, although in some of the reported cases arthritis was present. Matsuoka's patient, a Japanese, had chronic ankylosing arthritis of the elbow joints. Emerson found one reported case with arthritis deformans of both knees. Bartlett's patient was a woman, aged 53 years. The pituitary gland measured 21 x 11 x 7 mm., being considerably larger than normal. Bartlett thought there was increased functional activity of the gland.

The hypophysis was normal in the cases reported by Ramsburgh, Hudelo and Heitz, and Menetrier and Gauckler.

There was an apparent lack of *parathyroids* in the case reported by Higbee and Ellis.

In Askanazy's case (1904) the thyroid gland was enlarged. In Levi's case (1897), the thyroid was extensively sclerosed. The case reported by Chartier and Descamps had a higher temperature on the right side of the body. She also had *tabes dorsalis*, and the thermic changes may have been due to nerve lesions associated with that affection.

Weber (1908) distinguishes between osteitis deformans of congenital syphilis and Paget's osteitis deformans. In most of the cases, Paget's disease begins between the 30th and 60th year. There have been a number of younger patients reported. In Ravenna's (1909) patient, aged 58, the disease began at 15 years. In the case reported by Moizard and Bourges (1892), the condition began at 21, the patient dying of gastric cancer at 73. In one of Elsner's cases (1910), a girl aged 17, the disease began when she was 12 years old, and in one of Sonnenberg's (1904) cases, a girl aged 16, the onset was at 14. One of Stilling's patients (1890) was ninety-two years old; this is probably the oldest case reported.

Claude and Oury, in *Bulletins de la Societe Medicale des Hopitaux, Paris, Feb. 10, 1922, 46, No. 5, p. 283*, report a case of Paget's disease of the bones with *tabes*

dorsalis in a woman, aged 57, who was being examined for a fleeting acute infection when signs of both Paget's disease of the bones and signs of tabs were discovered. Claude cited some other cases which suggest a connection with syphilis in certain cases, and, in the discussion that followed, Lereboullet reported an instance of Paget's disease of the bones developing simultaneously in a man and his wife. The woman had been treated for syphilis, dating from ten years before her marriage to this second husband who has never shown any signs of syphilis unless the Paget osteitis is accepted as such. Milian stated that six patients with the Paget osteitis had been benefited by specific treatment as for syphilis. Achard recalled that the lesions of Paget's disease of the bones are more of the type of those of inherited rather than acquired syphilis. Chauffard knows a family in which both mother and daughter present typical Paget osteitis. Achard argued that the spirochete of syphilis does not act directly on the skeleton but modifies indirectly the production of bone.

J. Chalmers DaCosta of Philadelphia, in *Surgical Clinics of North America* (Feb., 1921), page 41, reports a case of Paget's disease in a colored woman, aged 52 years, a native of Pennsylvania. She complained of severe and persistent pains in the bones of the legs. Six years ago, she began to suffer from aching in the bones of both legs. The pain is sharp in character and is present even when lying down. It is worse just below the knees. She is weak and can walk but a short distance without exhaustion. She has a cervicodorsal kyphosis. No pains in the arms. The head is much enlarged, it being the shape of a triangle, the base of the triangle being at the summit of the calvarium and the apex at the point of the chin. The bones of the face show no enlargement. The chest is deformed by curving of the ribs. The bones of the legs and forearms are enlarged. Blood Wassermann reaction is negative. Eye examination shows no signs of pressure or atrophy. The urine, heart, temperature normal. X-ray examination confirms diagnosis of Paget's disease. DaCosta says, over 250 cases have been reported. Many of these cases are probably never recognized and go along unreported. Locke, too, states that about 250 cases have appeared in the literature. Early in the disease the bone is soft; it can be cut with a knife; later it may become extremely hard.

Von Recklinghausen believes osteomalacia to be the first change and the bones bend because of the thin bony cortex and later, as the result of inflammation in the region of osteomalacia there is formation of fibrous tissue. The tibiae are probably the bones most commonly affected. The skull, of course, is affected in most of the cases. The vertebrae are almost always involved in the process. DaCosta states "the x-ray is of the very first importance in diagnosis. It demonstrates cases of Paget's disease long before the deformity appears. It identifies the characteristic changes going on in the bone. It makes the diagnosis from all other bone conditions. All patients with bone pains should have x-ray pictures taken."

Edwin A. Locke, of Boston, in *Medical Clinics of North America* (January, 1918), reported a case of osteitis deformans with sarcoma of the humerus in a violinist, aged 62. For the past eighteen months had pain and swelling of the right elbow. Now the pain is felt also in the forearm and lower arm. Blood Wassermann test is negative. The legs were markedly bowed, the curve being outward and forward. The tibiae are enormous, being at least twice their normal size. The pelvis is extremely broad, and the bones are very massive and irreg-

ular. The patient's appearance suggests the anthropoid ape in the position assumed on standing. The forward position of the trunk, the unusually long arms, the bowing of the legs, the head resting almost directly on the shoulder girdle, the chin is carried forward, practically setting on the sternum from which it can be raised only an inch or two.

Locke's article on osteitis deformans in *Oxford Medicine* is an excellent one and contains a most complete review of the subject.

The nine cases reviewed in this paper occurred in the medical, neurological and surgical services of the various chiefs of the Philadelphia General Hospital. I acknowledge with deep appreciation the hearty co-operation and assistance given me by the visiting physicians in whose services these cases occurred. I particularly wish to express my thanks for permission to use the material and the notes in these cases, to Doctors Robert G. Torrey, L. Napoleon Boston, A. A. Stevens, Joseph C. Doane, William Pepper, J. H. Lloyd, C. S. Potts, J. W. McConnell, David Riesman, M. A. Burns, Charles W. Burr, E. D. Funk, and Doctor Hamilton, and others.

Cases.

Case 1.—Thomas C. was in the service of Dr. J. B. Carnett and previously in the service of Dr. Joseph Sailer.

Case 2.—William S. was in the service of Dr. L. Napoleon Boston.

Case 3.—Anna S. was in the service of Dr. A. A. Stevens and Dr. Joseph C. Doane.

Case 4.—Joseph F. was in the services of Drs. William Pepper and the late R. Willson.

Case 5.—Margaret C. was in the services of Drs. J. H. Lloyd, C. S. Potts, T. H. Weisenburg and J. W. McConnell.

Case 6.—George H. L. was in the service of Drs. G. M. Piersol and David Riesman.

Case 7.—Andrew Z. was in the Mental Department under Dr. Hamilton's care and previously in the services of Drs. J. B. Carnett, Ingham, and T. H. Weisenburg.

Case 8.—Alexander M. was in the services of Drs. A. A. Stevens and M. A. Burns.

Case 9.—Henrietta N. was in the services of Drs. Robert G. Torrey and Charles W. Burr.

Case Reports.

CASE I.

Thomas Cavanaugh, Men's Surgical Department. Philadelphia General Hospital, No. C 5358; Surg. Service of Dr. J. B. Carnett.

Chief filing diagnosis: Emyema and rib resection. Senility. *Paget's disease of the bones.*

Admitted March 11, 1922. Died, April 6, 1922.

This patient was first admitted to the Pneumonia Ward, service of Dr. Sailer, with the diagnosis of lobar pneumonia, the patient developing empyema. A white man, 72 years, and an upholsterer.

Past Medical History: Has always been healthy, except for occasional colds; had some rheumatism; fracture of the humerus; no operations. Has had some swellings of the left leg at times during the past year; has had no hemoptysis, no night sweats, no coughs; denies venereal disease; has used considerable alcohol at times; smokes and chews to excess. Was a doorkeeper in a hospital for ten years; wife died of insanity; had three children, two living and well; one died of epilepsy and alcoholism.

Family history: Father and mother died of old age; two brothers and two sister dead; no family tendencies.

Physical Examination: The patient is very emaciated and shows advanced signs of senility; he appears in a very weakened condition.

Head—Large, and resembles hydrocephalic type; suggestive of Paget's disease.

Eyes—Arcus senilis, cataract present in both eyes, pupillary reflexes normal.

Mouth—Tongue coated, teeth carious, pyorrhea present, pharynx congested.

Chest: Limited motion, especially on the right side, there is flatness over the lower two-thirds of the right chest, breath sounds are distant over this area of empyema, fine moist rales in the left base.

Heart: Rapid rate; extra systole present, poor quality of tone; no murmurs heard.

Blood vessels: Showed marked degree of sclerosis.

Abdomen: Negative.

Extremities: Left humerus thickened above the elbow; left tibia thickened above the ankle.

March 13, 1922—Chest aspirated and 38 ounces of serous fluid obtained (right side).

March 20, 1922—24 of sero-purulent fluid was removed.

March 28, 1922—22 ounces of thick pus was obtained from the chest.

Dr. Sailer advised that the patient be transferred to the Surgical Department, that the chest may be properly drained; because of the shape of the skull, humerus and tibia, Dr. Sailer considered this a case of Paget's disease.

Operation for the empyema was performed by Dr. Alfred C. Wood, assisted by Dr. Whelan, under novocain one-half per cent. on March 31, 1922. Incision was made in the mid-scapular line; about four inches of the eighth rib resected; about one pint of thin, dirty yellow pus escaped; two one-half inch rubber tubes were put in the cavity and sutured to the skin wound; patient died on April 6, 1922.

Urinary analysis: 3.12.22. Acid; 1.030. No sugar, faint trace of albumin, occasional granular casts, many leucocytes.

March 26, 1922—Light straw color, no sediment, alkaline, 1.016. No sugar, faint trace of albumin, occasional granular casts, ten to twelve leucocytes, many R.B.C.

March 30, 1922—Straw color, no sediment, acid in reaction, 1.020. No sugar, faint trace of albumin, few granular and hyaline casts, few leucocytes.

April 1, 1922—Deep yellow color, no sediment, acid, 1.018. No sugar, light cloud of albumin, myriads of leucocytes (after operation).

The fluid from the pleural cavity (after operation) showed many pus cells.

Roentgenographic Reports: The bones generally show areas of rarefaction in conjunction with areas of increased density, due to bony proliferation. The roentgenogram has some of the ear marks of *Paget's disease*, although not altogether typical. If taken in conjunction with roentgenograms of the distal half of the humerus and that of the shaft of the tibia, the question arises whether or not the process is not luetic. The humerus is markedly expanded and shows areas of complete bone destruction. The tibia is twice as thick as normal throughout the length of bone, there are areas of rarefaction very suggestive of luetic osteomyelitis. (No. 17137, 3 plates, 10 x 12, April 6, 1922.)

CASE II.

William S., colored, aged 58 years.

This patient was in the Medical Wards of the Philadelphia General Hospital before. At that time his chief complaint was rheumatism, swelling of the feet and shortness of breath; he was in the hospital for a month; comes in to the hospital again complaining of shortness of breath, especially on exertion. Cannot hold his urine. Complaints of frequency and urgency of urination. Feet are swollen. Appetite is good. Bowels are regular. No pain. (March 30, 1922.)

This patient was admitted to the medical service of Dr. L. Napoleon Boston.

NOTES MADE BY INTERNE ON ADMISSION.

Examination—Shows a fairly well nourished negro. Apparently very little distress.

Head—Hydrocephalic.

Ears and Nose—Gradually negative.

Pupils—Pin point and do not react to light and accommodation. Tongue coated, no tremor or deviation. Teeth in poor condition.

Lungs—Negative except for rales at bases.

Heart—Diffuse apex beat; apex beat visible in anterior axillary line, 5th interspace. Loud systolic murmur heard with loud accentuated second sound over aortic area. Murmur not transmitted to the neck; second pulmonic sound is split; slight systolic murmur at apex transmitted to axilla. No thrill felt.

Abdomen—Negative. Liver and spleen not palpable.

Diagnosis—Arteriosclerosis; aortitis; mitral insufficiency; cardiac hypertrophy. *Paget's disease*.

4.14.22. Eyes—Neuro-retinitis; media clear, disc oval, blurring of margin of disc, old choroid retinitis. (O'Brien per Arnold.)

On previous admission, 12.27.21 (Dr. Stahl's service) these notes were obtained by the interne: Patient's trouble dates back to 1889. He worked on an ice wagon; since October, 1921, he has been troubled with swelling of the feet and legs, and pain, and shortness of breath. Has not been able to work since October. Has had some swelling of the feet since 1889. Much worse since October-November, 1921, palpitation.

P.M.H. Had scarlatina and typhoid fever in childhood. First

attack of "rheumatism" in 1887. The pain was always in his feet and legs. Hands now swollen for the first time. Denied gonorrhoea. Had sore on penis 10 or 11 years ago.

F.H. Wife died of consumption at 48 years. Six children dead; 3 died in infancy. Wife had no miscarriages.

At this time examination showed pupils react very sluggishly to light and accommodation. Right pupil irregular.

Marked pyorrhoea alveolaris.

Heart—Systolic murmur heard over mitral area, not transmitted to axilla; to and from murmur heard over aortic area, along the left border of the sternum and in vessels of neck.

Legs—Scrotum and penis oedematous.

B.—120; R.S.—120. D.—200.

1.1.22. Final note: Aortic insufficiency; mitral insufficiency; cardiac decompensation.

Roentgenographic Reports: April 6, 1922. No. 17148, April 7, 1922.

The skull is much enlarged, due particularly to the thickening of the outer plate. The bones show areas of rarefaction plus areas of density due to long purification. The roentgenogram is typical of that of *Paget's disease*.

No. 17147 (April 7, 1922)—The bones of tibia—left—show no bone changes. There is no atheroma of the vessels. There is very slight calcification of the posterior tibial.

Electrocardiogram (March 24, 1922)—Left ventricular preponderance.

January 23, 1922—Left preponderance inverted T-i. Diphasic T-ii.

April 22, 1922—Regular rhythm at present. (Dr. McMillan.)

Urine Analysis: S.G. 1.020–1.022.

trace of albumen, no sugar, no sediment, no casts. April 26, 1922—Hb.—80 per cent. R.B.C., 4,100,000. W.B.C., 10,000.

Differential—polys. 76; Lymph. 17; Mono. and trans. 6; cosin 1.

Blood Wasserman—All antigens—negative.

Blood Chemistry:

Blood Urea—N. 25 mgm. creatinine 1.3; chlorides 520.

Blood Sugar—100 mgm. Tolerance—100 mgm. fasting; 185 mgm. 1st hr.; 180 mgm. 2d hr.; no glycosuria, after 100 gms. of glucose.

Basal Metabolism—36 minus.

Urine: Bence-Jones protein—negative.

Measurements—Height, 60 inches; torso, 30.5 inches; leg (pubis to floor), 29.5 inches.

Roentgenographic Reports: (Dr. E. Burvill-Holmes), No. 17679. June 2, 1922.

X-rays of left and right femora—two plates 14 x 17. The entire right femur is considerably enlarged throughout its entire length. The bone presents a peculiar moth-eaten appearance. The enlargement of the left femur is somewhat greater than that of the right. A similar condition exists of both ischiae—*Paget's Disease*.

No. 17662 (June 1, 1922—10 x 12. (Skull) No. 17148.

The sella is shallower than normal. The anterior portion of the floor, while thin, is intact. The posterior portion of the floor is eroded through. The anterior clinoid is thin and there is a separation of the tip of the posterior clinoid.

Basal Metabolism Rate—is minus 36. 6.1.22 W. B. Stoner, M.D. As the patient did not co-operate very well, the result is not reliable.

CASE III.

Anna S., white woman, age 49, service of Dr. A. A. Stevens, Medical Ward, and Dr. Jos. C. Doane, Philadelphia General Hospital. Admitted, 5.19.22.

Complaints—Pains in the knee, back, hands and shoulders.

Family History—Father died at 61, of kidney trouble. Mother burned to death; one brother living, "weak lungs." One sister living and well; no other members of her family similarly affected.

Previous Medical History—Was always a weak child and nervous, had fainting spells, whooping cough, measles, and mumps in early girlhood. Had sore throat often, diphtheria at 14, tonsillitis often. Menses always regular and normal—but ceased entirely about 3 years ago (age 44); following tonsillectomy at St. Joseph's Hospital. Has had hysterical spells all her life. Has had many shocks and griefs; married at 20; one miscarriage, three living children—all have bronchial coughs. Husband killed accidentally.

History of Present Illness—Joint pains were first noticed 3 years ago, when the right shoulder was very painful. No other joints were affected until May 14, 1922, when she noticed pain and feeling of heaviness in both knees and feet. For past 4 years has had roaring noise in head. The head gotten progressively larger at the top and above the ears. She first noticed some enlargement of the head one year ago when buying a hat. For the past 6 months she has had a feeling as if there were a tight band about her head. Has seen spots before the eyes at intervals

during the past two years, and looked as if bugs and ants were running over the bed clothes.

Examination—Middle aged woman, sallow complexion, little expression, in some apparent distress.

Head—Is remarkably enlarged in its upper portion, and viewed from the front is triangular in shape, with the base of the triangle upward, the apex at the chin. There is a prominence (fullness) of the forehead and in both temporal regions. In its greater circumference 25 in. (55 cm.).

Eyes—Drooping of both upper eyelids; slight interval strabismus of right eye; the pupils are dilated and equal; the left being slightly irregular in outline both react promptly to light and accommodation.

Nose—Normal.

Ears—Hearing diminished in both.

Mouth—Tongue is red, dry, furrowed, does not deviate from the midline, jaw prognathus, teeth are artificial.

Throat—Reddened and dry.

Neck—Slight glandular enlargement, painful, and tender along back of the neck.

Thorax—Slightly flattened antero-posteriorly in the upper portion, clavicles prominent.

Lungs—Negative.

Heart—Loud, blowing murmur, high pitched, short, first sound; second sound lower pitch than normal.

Blood Pressure—S. 125. D. 45.

Scoliosis in upper lumbar region, marked pain in the lumbar region over the vertebra.

Abdomen—Negative.

Extremities—Left knee painful but not redened, hot or swollen, the right is less painful, pain extends down the left tibia which feels heavy and is marked in the left great toe. There is much pain with some fusiform swelling of the joints of the index and middle fingers of both hands.

Urine Analysis—May 20, 1922.

Scanty, crystalline sediment, acid, no sugar, faint trace of albumen. S.G., 1.020. Uric acid crystals, no casts, few leucocytes. May 24, 1922.

Deep yellow, fine granular sediment, 1.020, no sugar, no albumen, no Bence-Jones protein. Amorph. phosphates crystals, few epithelial cells and leucocytes. May 22, 1922.

Blood Count—R.B.C., 4,350,000; W.B.C., 6,000.

Differential—Polys., 67; lymphs, 32; eosino, 1 per cent.

May 26, 1922—**Blood Chemistry**: Urea, 25 mgm.; uric acid, 6.6 mgm.; chlorides, 530.

May 25, 1922—**Blood Wasserman**—Negative.

May 23, 1922—S., 125; D., 45.

Roentgenographic Reports—(No. 17615).

May 23, 1922—The lower third of the tibia left shows considerable rarefaction, it is thickened, somewhat roughened, and bowed with rarefactions plus bony proliferation of the condyles. The right femur is apparently normal. Both ilia show much the same appearance as the skull, but to a lesser extent. Here and there are areas of rarefactions with areas of density. This is similar in appearance to the head and neck of both trochanters of the femora, but is more marked on the left side, there is a bony de-



Blood Wasserman—Negative.

June 3, 1922—**Urine Analysis**—Faint trace of albumen. S.G., 1.002. Bence-Jones protein—negative.

Measurements—Height, 57½ inches; weight, 87 pounds; torso, 29 inches; pubis to floor, 28½ inches; left arm, 24¼ inches; right arm, 24¼ inches; skull, 25 inches circumference; 16 inches antero-posteriorly; and 14¼ inches across (above and between ears).

CASE IV.

Joseph E. Frey. Medical, F. 9831. Service of Drs. Wm. Pepper and R. Willson.

Admitted, May 27, 1915. Died, July 27, 1915.

Diagnosis—Mitral regurgitation (1), chronic interstitial nephritis (2), uremia (3).

Color—White. Nativity, Philadelphia. Age, 65 years.

Chief Complaint—Shortness of breath, swelling of legs and scrotum.

Ambulance History—Duration of illness, two months. Shortness of breath, has to sit up at nights. Swelling of legs and scrotum. Appetite good. No pain except occasionally over epigastrium. No headache, cough. Thrill over precordia.

Family History—Father and mother dead; cause probably old age on both. Brothers all dead; one of goat skin poison; other not known. Sisters all in good health. There is no history whatever of cardiac, renal, pulmonary, nervous, hereditary, nor transmissible disease in the family.

Past Medical History—Had measles, and whooping cough as a child, one sister had scarlet fever while he was young but he escaped. Never had any serious illness. Once had goat skin poison. Occasionally short attacks of rheumatism. Kidneys have always been good. Was a true young American; when young no serious complication. Says he has never used alcoholics freely.

Past Illness—Began two months ago with swelling of feet and scrotum. Very soon after he developed shortness of breath. Swelling of extremities and genitalia became pronounced. Very soon he could not get his breath at night when lying down. Aside from this he had no symptoms. Appetite always good.



formity of the lumbar vertebra from 2-5 with considerable destruction of the third lumbar; the dorsal vertebra, scapulae and the clavicles appear normal, as do also the radius and the ulna and the carpal bones.

Roentgenographs—Of the right and left sides of the skull show a typical picture of Paget's Disease (No. 17590). May 23, 1922.

June 7, 1922—**Roentgenographic Reports** (Dr. E. Burvill-Holmes)—No. 17722, 2 plates, 10 x 12. The sella owing to the condition of the bones of the skull (Paget's disease) is not clearly outlined. Apparently it is thin and irregular. The posterior clinoid, while of normal size, appears thinned out. The patient is at present in the service of Dr. Joseph C. Doane, interne Dr. F. J. Hudson.

Physical Examination—Large adult, male, white, well developed and nourished, entered on stretcher but conscious.

Head—Negative. Edematous on right side.

Eyes—Reaction normal. Eyelids puffed on right side.

Neck—Large soft fluctuant mass on right side below jaw and ear. Due to edema.

Chest—Large, well developed, expansion limited. Equal on the two sides. The right side shows intense edema of the entire chest wall.

Lungs—Clear on both sides. No solidification.

Heart—Loud systolic murmur is heard over the entire chest wall anteriorly. It is strongest at apex region and probably mitral in origin. The second sounds are more or less normal at all

valves. Heart is greatly enlarged and arrhythmia is pronounced. **Abdomen**—Right side very edematous. Cannot take out broader of liver.

Genitalia—Intensely swollen. Scrotum almost size of adult head.

Extremities—Right leg and arm very much swollen; left leg less so.

Diagnosis—Valvular heart disease, myocarditis, nephritis (?) May 30, 1915—Edema is slowly disappearing; there is still unilateral edema extending from head to foot. Scrotum no larger than coconut now.

June 1, 1915—Edema still disappearing. Patient lies on right side continually; edema unilateral. Has been delirious for past two days. Easily managed.

June 2, 1915—Quiet but delirious all morning. Spinal puncture at 2 P. M.; gave 3½ ounces clear fluid.

June 4, 1915—Has been wildly delirious the past two days. Morphine quiets the patient very effectively. Strophanthin grain, 1/200, given intravenously in 12 c.c. sterile water.

June 10, 1915—Delirium has almost disappeared. Edema all gone. Tissues very much wrinkled now.

June 13, 1915—Delirium has not improved during past two days. Spinal puncture showed pressure a trifle above normal; 1¼ ounces removed. Eats, sleeps and eliminates well.

June 17, 1915—Patient is now mentally clear. He says he has been totally blind. He can now distinguish objects held before his eyes. He eats and sleeps well. Bowels regular; color of skin improving rapidly. Insists that someone is trying to shoot him.

July 3, 1915—A petechial rash scattered over the anterior and posterior and upon the abdomen. Some cyanosis of the alae nasi with dilatation of these. Posteriorly in the upper portion of lower left lobe increased vocal fremitus with suspicion of tubular breathing; mucus rales are heard now and then.

July 5, 1915—Rash is becoming faint, almost indistinct. General condition of patient is improved; mentally clear.

July 17, 1915—For about a week or ten days the right hand has shown some edema, probably due to patient lying on right side.

July 20, 1915—Considerable edema of scrotum and penis.

July 22, 1915—Unilateral oedema of right side, involving the arm, hand, chest and leg, also the scrotum. The belly gives evidence of some fluid being present. Patient at present lies on right side.

July 24, 1915—Patient is very somnolent; oedema of legs, hands and face.

July 25, 1915—No improvement; patient is delirious and gradually failing; all tissues filling with fluid.

July 27, 1915—This morning patient unconscious; lungs filling—oedema; 4.35 P. M. patient died.

M. L. SENG.

LABORATORY RECORD.

URINE ANALYSIS.

May 28, 1915—Amber; Sed., Neg.; Re., Acid; Sp.-Gr., 1021; S., Neg.; Alb., Trace. Many granular cells. Hyaline casts pus cells a urates many epithelial cells.

June 4, 1915—Cloudy; Heavy; Acid; 1024. Trace; Many Leucocytes casts and R.B.C.

June 12, 1915—Amber; pos.; Acid; 1920; neg.; neg.; Epithelial cells few.

July 23, 1915—Amber; fec.; acid; 1018; neg.; neg.; Leucocytes good many. No casts or crystals.

BLOOD PRESSURE.

May 30, 1915—Systolic, 192; Diast., 140.

June 5, 1915—Systolic, 210.

June 8, 1915—Systolic, 190; Diast., 100.

June 28, 1915—Systolic, 160; Diast., 115.

BACTERIOLOGICAL RECORD.

June 2, 1915—Spinal fluid cytological examination negative. Wasserman test moderately positive.

Philadelphia General Hospital, Post Mortem Record, No. 3713.

Joseph Frey. Autopsy performed by Dr. E. D. Funk.

Admitted, May 27, 1915. Date and hour of death, July 27, 1915, at 4:45 P. M.

Male; aged, 66, white; Philadelphia.

Clinical Diagnosis—Mitral regurgitation; uremia; chronic interstitial nephritis.

Pathological Diagnosis—*Osteitis Deformans*. Dilatation and hypertrophy of heart. Chronic aortic and mitral valvulitis. General arteriosclerosis; chronic interstitial nephritis; edema and congestion of lungs; bilateral emphysema of lungs (moderate). Hydroperitoneum, bilateral hydrothorax, congestion of the spleen and liver.

Body is that of a rather poorly nourished adult, white, male. Rigor mortis present, but easily broken up. Antero-posterior diameter of chest increased; marked prominence of sternum and ribs—first to fourth inclusive.

Head—Considerably broadened, especially in temporal region. Slight bowing of the right forearm and of right leg. Marked

prominence of left tibia, suggesting "saber-like" tibia. **Left femur** also shows slight outward bowing.

Pupils are unequal, left slightly larger. Conjunctiva-faint yellow tinge.

Lower portion of right leg-marked discoloration of skin. Abrasion covered by dry serum. Lower extremities are edematous, as also penis and scrotum.

Peritoneum—Smooth and glistening; cavity contains 1800 c.c. of a clear, straw colored fluid.

Liver—Extends 5 c.m. below costal margin in mid-clavicular line, and 8½ c.m. below ensiform cartilage. **Appendix** is free from adhesions, lies in iliac fossa, and is directed down over pelvic brim. The cecum is distended and freely movable.

Intestines are collapsed. **Bladder** is distended, and upper margin extends well beyond pubic crest.

Left Pleura—Contains 480 c.c. of a clear straw colored fluid. Adhesions found over apex and base, those of base being most dense.

Left Lung—Shows considerable congestion and edema.

Right Pleura—Contains 550 c.c. of similar fluid; adhesions at apex.

Right Lung—Resembles its fellow. Free margins of both lungs meet in mid-line, are light gray in color; downy to touch and emphysematous. On superficial palpation, crepitus is apparently absent, but appears upon deep palpation.

Pericardium—Contains excessive amount of clear straw colored fluid.

Heart—Is enlarged, due to enlargement of right side, which is filled with dark red clots. It extends 6½ c.m. to right median line, and opening chest is entirely obscured by lungs. Apex extends down in sixth interspace well beyond mammary line. Right auricle contains partly organized clot, situated firmly in appendicular portion. Over the visceral pericardium, situated on the anterior and posterior surface of right ventricle, posterior surface of left ventricle, are irregular areas of thickening—"milk spots"—the largest appearing over anterior aspect of right ventricle. Over the base of the heart and large blood vessels are numbers of irregular, grayish areas. Pulmonic leaflets are thin and friable. Pulmonary artery shows no gross lesions, save for a few small grayish spots at the bifurcation. Left ventricle is slightly dilated. Wall of ventricle measures 1.9 c.m. in thickness. The myocardium is red and firm, capillary muscles are thick and sclerotic. Endocardium is gray and over papillary muscle is intensely thickened with lime-salt deposits. Aortic leaflets are thick at bases, slightly along the margins. Sinus of valvula are numerous deposits of calcareous nodules most marked in left posterior one. Immediately above anterior one is a distinct atheromatous plaque. Coronary arteries are thickened, throughout course are number of sclerotic patches. Left auricle is large, walls thin, foramen ovale closed, mitral orifice especially at right, are number of calcareous deposits, causing irregularity, traction, slight adhesion at junction of anterior and posterior leaflets along the left margin. These calcareous excrescences appear over mural endocardium of left ventricle around aortic leaflet. Free margin of mitral apparently not affected.

Spleen—9½ x 9 x 4½ c.m. Capsule is tense, and is covered by a number of irregular nodular thickenings. On section—splenic pulp is firm, trabeculae and follicles being prominent.

Left Adrenal—Shows no gross lesion.

Left Kidneys—Measures 11 x 7 x 4 c.m.; surface shows persistence of fetal lobulation; capsule strips with difficulty exposing a roughly granular, cortical surface. A number of small sub-capsular cysts also present. **Ureters** single and patulous.

Right Adrenal—Shows no gross change.

Right Kidneys—11½ x 6 x 4 c.m. Capsule strips with difficulty. Cortical surface is granular. Incised cortex irregularly narrowed. Peri-pelvic fat slightly increased in amount. **Bladder** shows no gross change.

Liver—Edges are sharp; surface slightly irregular and finely granular. On section—very congested, and shows a number of irregular yellowish areas.

Gall Bladder—Extends beyond margin of liver, and is filled with a thick viscid bile. Biliary passages patulous.

Stomach and Intestines show no gross lesions.

Pancreas—Shows nothing of interest.

Aorta—Shows many nodular, irregular and linear areas of sclerosis with calcification most marked at bifurcation and in iliac branches.

Heart	700 grms.
Left lung	760
Right lung	780
Spleen	160
Left kidney	180
Right kidney	170
Liver	1600
Brain and spinal cord	1270

Brain and Skull Cap—Skull cap is unusually thick, varying from 2 c.m. in thickness. It is thickest over the temporal region.

The outer and inner tables are firm, while the middle portion consists of a soft granular, friable, osteoid tissue. Ventricles at base of brain slightly sclerotic; membranes slightly edematous. Brain not opened but preserved.

CASE V.

Margaret Calhoun. Nerv., B. 2827. Women's nervous. Services of Drs. Lloyd, Potts and McConnell.

Admitted, November 5, 1915; discharged November 24, 1915; condition unimproved.

Diagnosis—Osteitis deformans; arteriosclerosis and mitral insufficiency.

Present Illness—Began thirteen years ago with severe and almost constant headaches and vertigo. Has been unable to sleep with a pillow under her head since the condition began. No deformity of the limbs was noticed early and only for the past three years has she been unable to walk, though for some years previous to that she walked with difficulty. Last June the patient states she fell out of bed, hurting her left hip severely. Since that time she has been unable to use her left leg and has held it in its present position.

Family History—Father died at 63 of rheumatism; mother died at 63 of tuberculosis. Four brothers all died quite young; one, pneumonia; one, tuberculosis; other two, cause unknown. One sister living and well. Nearly all of the maternal relatives died of tuberculosis or pneumonia.

Past Medical History—Measles and scarlet fever as a child. Typhoid fever when 15 years of age. Gives a history of several severe falls and injuries to the head. Severe bump on head over thirty years ago.

Menstrual—Began at 16, continued regularly until menopause at 45.

Social—Patient married at 26. Her husband was a sea captain and was away from home over long periods of time. The patient was always nervous and fearful during these cruises. (She attributes her present condition of extreme nervousness to this.)

Has had four children; two boys and two girls. The first child, a girl, died at eight months of age.

She attended school irregularly from the time she was 5 until her 17th year. Finished grammar school.

Physical Examination—Body much emaciated. Limbs deformed.

Head—Presents a triangular shape, base up. Very large. Marked embossment of the parietal areas, passing from one parietal area to the other and involving the entire occiput. Also a marked regular bony growth upon the vertex. A small area resembling a partially headed ulcer about one inch from the ala of the nose on the right side.

Face seems somewhat drawn to the right and fine twitching movements are noted, at the corners of the mouth and eye on the right side.

Eyes—Show distinct exophthalmos. The cornea of the right eye is opaque and the conjunctiva injected. (She says she had a corneal ulcer last June which, however, gave her no pain.)

Nose—Suggests "saddle deformity."

Mouth—No teeth. Tongue large, thick and flabby. Palate low and flat. Absorption of gums.

Chest—Clavicles are not markedly deformed or thickened. Left side of thorax more prominent than the right, which is sunken at the apices. Costal interspaces are quite wide and expansion of lower ribs give the base a "flared out" appearance.

Lungs—Expansion limited. Percussion: Right lung, somewhat hyperresonant; left lung, resonance impaired at apex. Auscultation—*Some rales heard in the right base. Harsh breathing in the left apex.

Heart—Apex beat not perceptible upon inspection or palpation. Percussion—Left border about one-half inch to left of nipple line; right border at right border of sternum. Auscultation—Sounds rather weak. Systolic murmur heard at the mitral area, which may be heard in the left axilla. Murmur heard at the aortic area, systolic in time—probably not aortic but due to roughening. Second aortic sound distinct.

Back—Hard to demonstrate deformity owing to difficulty in moving the patient. Appears to be some kyphosis in the upper dorsal region.

Abdomen—Liver, lower border at the costal margin. Did not palpate spleen. Muscles flabby, little fat. Pelvis—Somewhat flattened.

Extremities—Muscular atrophy and bowing. Arms—Humeri show distinct bowing outward. Movements somewhat limited. Flexion and supination of the forearms quite free. Extension limited. Radius and ulna—Slight bowing toward dorsal aspect.

Legs—Femurs bowed. Left thigh shortened and strongly flexed and adducted across the lower abdomen. Leg flexed upon the thigh. Complaints of pain upon attempts at moving. Tibiae bowed, fibulae little or not at all affected. "Saber" deformity.

Pulse—Suggestion of the Corrigan's water-hammer. Systolic

150; Diastolic 90. Left arm: arteriosclerotic temporals markedly tortuous.

Reflexes—Eyes: React to light and accommodation. Conjunctival reflex present. **Skin**: Umbilical and plantar present. **Tendon**: Biceps and triceps present but slow. Patellas and Achilles not demonstrated. Ankle clonus not present.

Sensation—Touch, pain and temperature normal.

Patient's mental condition good. *Very nervous and fearful.* Rather deaf.

11/24/15. Patient unimproved. Relatives insist on taking patient home.

X-Ray Plate No. 5123. (Not dated.)

Skiagraph shows marked thickening in tissues of skull. External plate of skull is roughened and markedly thickened. The internal plate can be defined over the occipital and post parietal regions, elsewhere it is indistinct. The femur shows a mere shell of compact tissue. This is probably a case of Paget's disease.

There is considerable formation of new bone in the lower portions of the plate of skull and the bone is rarefied.

11/9/15. Wassermann negative.

Patient readmitted 3/28/19.

Nerve. B. 9610. Women's Neurological Department, services:

—Dr. Theo. H. Weinsburg; Dr. Chas. S. Potts and Dr. J. W. McConnell.

Admitted to the Philadelphia General Hospital on Second Admission 3/28/19 and died 2/2/22. Autopsy 2/2/22. **Diagnosis**: —Osteitis Deformans.

Chief Complaint:—Helpless. Abscess in perineum.

Present Illness:—Began 5 years ago. Patient was getting ready for bed. Was sitting on the edge of the bed and fell. Patient could not stand on her left leg. Was all black and blue. The left leg was immediately drawn up on the body. Ever since she has been helpless. Patient's eye condition came on at the same time as the fall. She don't remember the eye being struck with anything. Gradually lost sight in right eye. Patient has an epithelial growth on her right cheek which she has had for three years. It began as a pimple which she picked and later a scale formed and has gradually increased in size to its present state. Patient didn't know anything about the curvature of her bones or the enlargement and asymmetrical development of her head.

Physical Examination:—White, female; 69 years; in bed. First thing that attracts attention is

Head:—The patient has an epithelioma on right cheek about size of hickory nut.

The patient's right eye is closed, but the eyeball is present. There is a constant twitching of the right cheek, drawing the mouth to the right and the eyelids toward the median line.

Facial symmetry present except for the twitching; marked nervous dystrophy of the head.

Nose slightly curved, drawn to the right, marked bony prominences extending to the right and left from the middle to the nasal bridge.

Increased curvature of the lower mandible, marked increase in cranial diameter.

Occipital Frontal, 26½ inches.

Occipital Bregmatic, 27 inches.

Mental, 20 inches.

Bitemporal, 26 inches.

Pulsation in supposedly veins of the head, at the juncture of the frontal, parietal, temporal sutures of the skull there is marked flattening and softening resembling failure of ossification, same on both sides.

Lower Extremities:—Patient lies on right side, the right leg flexed on the thigh and the thigh on the abdomen to about 45 degrees. The right leg is much larger than the left. Marked bowing of the right tibia anteriorly, foot is markedly swollen, blue and cold.

Left Leg:—Much smaller than the right with a mass resembling the soleus muscles on the inner side. Flexed at right angle on the thigh and the thigh at right angle to the body. Less bowing of the left tibia.

Patient cannot move either leg. Can move both feet at the ankle. Can move toes on both feet. Marked differences in length of femur, left roughly measures 12 inches. Lower leg measuring 17 from knee to ankle. Feet are equal.

Right:—Right femur measures 17 inches; right lower leg measures 17 inches.

Reflexes:—Knee jerks are obtained on either side. Achilles present on right side not obtained on left. Plantar irritation produces flexor. No ankle clonus. Patient can distinguish toe and position in which they are placed.

4/4/19. **History from Daughter-in-Law**:—Some 13 or 14 years ago patient was in bed for a whole year "sort of paralyzed." She improved and was able to be up again. She was bent double and walked with difficulty, supporting herself by furniture and walls. Has not walked since 1912. For years when she sat down her

legs were crossed, the heel of the left foot lying close along the right thigh near head of right femur.

Five years ago she fell and "broke her leg (left)." The doctor who attended her did not attempt to set the bone. At that time the leg became suddenly short, the muscles knotted, and from that time she has been unable to move the leg although she can move the feet and all of her toes.

While she was in bed with the broken leg, her "eyes got all swollen and pus formed." A doctor attended her and said she had "corneal ulcers and choroiditis." In June, 1918, there was a second infection of the eye. She has had no vision in right eye for 5 years.

During life patient has had several hard bumps on head. After the sea voyage (about 35 years ago) a lump grew on her head. At that time it was considered as a result of a bump received in the hatchway. States that when the lump (on the vertex) still increased and when the roof of her mouth became flat, the doctors thought she had brain tumor.

Marked pointing of the head midvertex, marked flattening of the occiput, and abnormal protrusion of the occipital eminence which continues from ear to ear.

Ears negative. Flattening of the left alae nasae.

Eyes:—Extra ocular movements normal. Lateral nystagmus present. The right palpebral fissures completely closed. Slight exophthalmus of the left eye. Pupil of left eye reacts to light and accommodation. Pupils central and regular. No diplopia. Patient can protrude the jaw laterally against resistance. Corneal and conjunctive reflexes present. Masseter contraction in good tone. Patient can wrinkle forehead, lifts and lowers eyebrows, close her eyes normally; in attempt to whistle the mouth is drawn to the right. Patient cannot hear a watch tick at the right ear and just barely hears it at the left. Patient cannot hear ordinary conversation. Patient has no alveolar ridges, teeth all gone, hard palate is flat with a central groove resembling a tongue, uvula small, tongue protrudes in midline, no scars, no tremor. Test phrases well pronounced.

Upper Extremities:—Arms: musculature poor. With arms extended has the appearance of frog legs. Marked anteriorlateral curvature of both humeri.

Forearms:—Curvature with ulna marked on left. Marked atrophy of interossei.

Thener and hyperthener eminences markedly atrophied. Tendons of flexor communis can be seen for the palm of the hand. Marked muscular atrophy of hands.

Reflexes:—Biceps and triceps and wrist jerks present on both sides.

Light touch—pain.

Heat and cold—present.

No tremors in extended arms. Muscular strength poor.

Grip of hands weak. Patient can perform all movements of her arms. No ataxia in F.N.T. or F.F.T. Limitation of extension of the forearm and arm.

Trunk:—Thorax is short, increased lateral diameters, prominent clavicle, infra and supra clavicular spaces are depressed, both mammae markedly undeveloped. Patient states that the left breast never was developed. Right breast was normal and patient nursed four children.

Lungs:—Negative.

Heart:—Maximum impulse in the 5th I.C.S. under the mid clavicular line, distinct systolic murmur heard in mitral area.

Abdomen:—Soft, umbilicus barely seen. Abdominal epigastrium reflexes present.

Patient's condition remained about the same.

12/31/21. Patient on this date had a slight elevation of temperature, 101; with a rapid pulse, 140; respiration, 30.

2/2/22. Final Note: The only physical signs in the last four weeks were blindness in right eye with deviation outward and downward and drooping of this lid; generalized arteriosclerosis; the bone deformities typical of Paget's osteitis deformans; partial deafness both ears; swelling of entire right leg; coarse moist rales throughout both lungs more marked in right base; cough and expectoration; mental retardation. There were no heart murmurs except systolic at apex. Knee jerks were absent and there was a bilateral Babinski. No mental symptoms except slight retardation and rather fearful.

Patient died. Diagnosis: Paget's disease. Acute bronchitis. (HOLTZHAUSER.)

X-Ray Plate No. 10375. Date 4/1/19.

Paget's Disease.

We are unable to compare present plates with the initial ones as the old plates were disposed of. The tibia has a mere shell of composite tissue, and considerable rarefaction, the distal half is very much thinned out, a similar condition exists in the humerus, also femur and tibia. The radiograph of skull is hardly recognizable as such, the bones show considerable porosity, with

here and there irregular areas of sclerosis. Marked atheroma of the femoral and tibia vessels.

X-Ray Plate No. 16017. Date 11/22/21.

Paget's Disease, the radiogram of the skull is typical.

Arms:—The distal portion of the humerus is enlarged, showing considerable porosity. The cortex of the radius and ulna are markedly thinned.

Legs:—The cortex of the femur, and the tibia, are roughened and thinned, the thinning being particularly marked in the tibia. The distal end is narrower than normal. The cortex of the fibula is also thin. There is atheroma of the femoral and post-tibial vessels.

Urine Analysis:—4/9/21. Straw; gray sediment; reaction—ampho; S. G. 1020; sugar and albumin—negative; no casts; few epithelial cells.

9/22/21. Straw; white; acid; 1020; no sugar; trace of albumin; casts 2-2; leucocytes; epithelial cells, squamous 40-50.

Wassermann test negative.

Feces:—No ova or animal parasites found.

Autopsy No. 6529. Date 2/2/22. Performed by Dr. McCutcheon; less than 24 hours after death.

Female; white; aged 58; admitted to hospital 3/28/19. Died 2/22/22. Clinical Diagnosis: Osteitis Deformans.

Bacteriological Diagnosis:—Heart blood;—Staphylococcus albus.

Gross Anatomical Diagnosis: Osteitis Deformans.

Fracture of left femur; edema of right lower extremity.

Generalized arteriosclerosis.

Heart:—Milk spots; calcification of aortic and mitral valves.

Lungs:—Acute hemorrhagic bronchitis; emphysema; caseous T.B. of bronchial lymph nodes.

Spleen:—Fibrosis.

Adrenals:—Lipoid exhaustion.

Kidneys:—Slight interstitial nephritis.

Uterus:—Mucous polyps.

Ovaries:—Sclerosis.

Liver:—Chronic passive congestion.

Veins:—Thrombosis of iliac veins.

Brain:—Moderate hydrocephalus. Cerebral arteriosclerosis; flattening and deformity of brain from pressure; conus medullo-cerebellaris pressure furrow.

Skull:—Paget's disease.

Histological Diagnosis:

Hypertrophy; coronary sclerosis; fibrous epicarditis.

Broncho-pneumonia.

Chronic interstitial splenitis; follicular hyperplasia.

Lipoid exhaustion.

Arteriosclerosis; cloudy swelling.

Fibrosis.

Chronic interstitial hepatitis.

Organizing thrombus.

Artery:—Arteriosclerosis.

Pancreas:—Fatty infiltration. Post-mortem changes.

Cause of death:—Osteitis deformans; broncho-pneumonia.

Margaret Calhoun:

External Examination.

General Statement:—White female, 58 years of age, appearing age stated, measuring 155 cm., and weighing 108 lbs., showing bony deformity especially noticeable in the tibiae and humeri. The tibiae are curved with convexity forward, humeri with convexity external. There is marked thickening of the skull, especially marked by a protuberance in the left temporal region. Marked edema of right lower extremity. Both legs are fixed in flexion, left thigh in adduction and internal rotation. There is marked deformity of the pelvis, with extreme narrowness of the pelvic canal. Anterior spine on the right side is displaced toward the midline, with flattening of the right ileum toward the horizontal flank; this is associated with kyphosis in the lumbo-sacral region. An incision over a fracture in the left femur shows that the fragments are connected by periosteum, which is thickened but can be easily stripped off. Bone is found softened moderately; canal is widened at the site of the fracture, but of more normal diameter 2 cm. above. Cross section was sawed from femur—this position. Mammary glands are atrophic. Changes are not observed in bones of forearm. Eyes—sclera on the left side is clear, right eye is sunken and scarred, with obliteration of pupil. Mouth—teeth are missing. Nose and ears externally normal.

(To be concluded)

A Retrospect, With A Glance Into A Possible Future

Some Observations and reflections by an Old-timer.

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One day, forty years ago, Dr. M. P. Hatfield, professor of pediatrics at Chicago Medical College, now Northwestern University Medical School, said to his class: "The difference between German and American medicine is this: In Germany the patient lives or dies for the benefit of the medical observer; in America the doctor endeavors to relieve the sufferings of his patient and restore him to health."

And the Dean, Dr. N. S. Davis, said to the same class: "You have received a very limited introduction to the science and art of medicine. Let me urge you to continue your studies. Investigate. Investigate. It may be your privilege to add something to the armamentarium of the physician which will enable him to save a life and to relieve suffering."

This was the dominant note—to do something for the patient.

It is doubtful if there existed at that time a single chair devoted exclusively to the subject of diagnosis in an American medical school. Certainly the first American volume on that subject had not been published (Da Costa). The clinical thermometer was a recent invention. Few of the American profession troubled themselves with urinalysis, or knew how to make the simple tests for albumen or sugar.

Few, if any, schools of that date had microscopes for the use of students. We studied gross pathology at first hand, but for the microscopical appearances depended upon verbal descriptions or crayon sketches on the blackboard. The Old-timer well remembers the beautiful pictures that Christian Fenger used to draw with colored crayons, though hardly a word of the accompanying lecture was understandable.

Christian Fenger gave a tremendous impulse to the study of pathology and diagnosis, and the science of pathology and the art of diagnosis made rapid headway in America. Men began to limit their practice to diagnosis, and these, or some of them, regarding diagnosis as an end rather than as a means to an end, soon lost interest in remedial agencies, and a cult of "therapeutic nihilists" grew up who, strange to say, seemed proud of this distinction, and we were, so far as they were concerned, just about on a level with the German physicians of whom Dr. Hatfield spoke, and patients lived or died for their benefit.

But some ten or twenty years before the time mentioned in the beginning of this veracious history, men here and there in the medical world began to study the physiological action of drugs. They were not satisfied to know that a drug had a certain effect. They wanted to know how and why. The Old-timer well remembers asking a friend just home from Bellevue if many new remedies were coming into use. "No", replied the doctor, "but we are finding new uses for old remedies." This was a great gain. But with the gain came a certain loss. In our desire for definite, scientific knowledge, in our eagerness to know the how and the why, we conceived a profound scorn of empiricism. Empiricism became the *bête noir* of men who hugged to themselves the proud consciousness of being "scientific" physicians. Of course this was foolish, for empiricism is the first step toward scientific medicine. And who shall say, without crossing his fingers, that much of the "science"

of today may not be in the discard tomorrow? Is it not possible that some of the refinements of today may be properly ignored tomorrow?

For example: A few years ago the Council of Pharmacy and Chemistry dropped from the list of new and non-official remedies a certain combination of bacterial vaccines for the reason, as stated, that it was recommended for so many different diseases, "just like a patent medicine."

It was recommended for use in many diseases, as are many useful and time-honored remedies in the pharmacopoeia, which are not compared to a patent medicine. It was recommended for iritis, otitis, pharyngitis, bronchitis, pneumonia, gastritis, nephritis, and many others, in which the streptococcus plays an important role as a destructive agent.

Diseases are named and classified according to the history and physical findings, which vary according to the organs involved. But the same infecting germ is found in many organs, and gives rise to the variously named diseases. And the vaccine referred to was prepared for the purpose of making war on the enterprising "bug", wherever found. It made no difference to the vaccine whether his enemy was in the iris or the kidney, or what the disease or pathological conditions was called. The vaccine went after the "bug", and had no time to waste on the bad language or faulty therapeutic concept of the Council of Pharmacy and Chemistry.

How many of the readers of this article, if it should have any, have ever heard of "the cooling draught"? The Old-timer has asked scores of physicians under 50 without finding one familiar with the preparation. Occasionally an old-timer like himself, on being questioned, knits his brows and says: "Ye-e-es, now what the—excuse me—what is that anyway?"

"The cooling draught" was probably, except calomel, the most widely and frequently used preparation known to the medical world of a hundred or more years ago. It was a combination of sodium and potassium and other salts, (the exact formula is not available), and was used in the treatment of fevers. It pulled down the temperature. Of course there was no such thing as a clinical thermometer at that time, but the effect of "the cooling draught" was so pronounced that there could be no doubt about it. At a time when our professional fathers and grandfathers refused to open a window in the sick-room, and looked on water for the sick with abhorrence, the cooling draught was given with benefit.

Well, fifty or sixty years ago, the profession began to study the physiological action of drugs. We learned that aconite and veratrum have a depressing effect on the heart; that strychnin has a special affinity for the spinal cord; that digitalis and ergot have a like affinity for unstriated muscular fiber. O, we learned a lot of useful things about the action of drugs. But no one could tell how the cooling draught acted. We had not the necessary data, and those data were not to be discovered for several years. And unfortunately the mere empirical fact that the cooling draught lowered the temperature in fevers was not a sufficient justification for its use among men so determined on being scientific.

By this time the profession had pretty well gotten over

the old horror of cold water, internally and externally, and of fresh air, and we had learned carefully the demonstrations of the depressing effect of aconite and veratrum on the heart, so the cooling draught was discarded, and the scientific remedies substituted, and we held up our heads, and, it is feared, swelled our chests, proudly conscious of our scientific attainments, and wondered why our patients did not respond more promptly to the scientific treatment.

The Fathers knew little about the blood, though they knew more than did the Grandfathers of a former generation who derided the idea that the blood flowed through the arteries.

Few, if any, knew the chemical reaction of the blood, and no one knew that the alkalinity is a necessary factor, enabling the blood to carry antibodies through the system to fight the infection of which they knew nothing. They had heard the old phrase, "*vis medicatrix naturae*," and entertained a pretty lively conviction that there was something in the system, or more or less intimately connected with it, that enabled it to resist the encroachments of disease, but they knew nothing of a physical expression of this "*vis*" which for want of a better name we call "antibody."

They did not know, these men of a hundred years ago, that diseases are often caused by minute vegetable organisms which we now call "bacteria". Indeed, that idea, when it appeared, some forty to fifty years ago, aroused, as new and revolutionary ideas are prone to do, the bitterest hostility among the men who occupied the seats of the mighty. The Old-timer well remembers the scorn with which one of the most illustrious men that American medicine has produced spoke of experiments on an animal "so frail that it will fall over dead if you give it a cross look."

And of course they did not know a later development of the germ theory of disease, that the germ which causes the trouble may, when properly killed and injected into the body, arouse the tissue cells to a greater production of antibodies, and thus materially aid in overcoming the disease caused by the living germ. And knowing nothing of the germ theory, and nothing of its later development, and nothing of antibody, and nothing of the alkalinity of the blood as a necessary factor in its distribution, they gave the cooling draught empirically, and got just as good results as we of today, who use it, or an equivalent, scientifically. The Old-timer has a friend who, before he began to specialize, was a very well equipped bedside physician. One day the doctor was asked if he were using vaccines. He replied that he was not, and gave as a reason that as yet no scientific theory had been advanced which in his judgment sufficiently explained their alleged action. He was then asked if, while in general practice, he had used antitoxin, but not until he had understood the theory. He was then asked if he did not think that his babies would have done just as well if he had given the antitoxin before he understood the theory as they did after, and if, as a matter of fact, his malaria patients did not respond as promptly to the exhibition of quinin before the discovery of the plasmodium as after, and he was silent.

Let not the reader think this a diatribe against science, or an argument in favor of empiricism as opposed to science. Science is defined as "classified knowledge". It is not defined as perfect, or all-inclusive knowledge. So far as the Old-timer knows, no one has undertaken to say just where empiricism ends and science begins. Both belong to the realm of knowledge. Perhaps when a second fact is discovered, and its connection with the first fact is recognized, and a theory formulated in ex-

planation of their relationship, there two facts and one theory may be promoted to a humble place in the great Temple of Science. Or more facts may be required. But we can't have the later facts until we have the first, and we can't have the theory which arranges the facts logically and shows their proper relationship one to the other until we have the facts. The American back-woodsman of a hundred years ago who poured turpentine into an open wound practiced antisepsis before Lister was born. And the old midwife who scorched the cloth with which the cold of the newborn child was enveloped practiced asepsis just as truly as the cleanest and best appointed maternity in this sanitary world. The one was empirical, and other scientific. And, as always, the empirical was the forerunner of the scientific.

As was said above, few physicians, forty years ago, paid any attention to the chemical examination of the urine. But twenty years later the clinical laboratory made its appearance, with its promise of tremendous help to the diagnostician, a promise that was at first underrated, and then as greatly over-rated, by vast numbers of the profession.

Let not the Old-timer be accused of regarding the clinical laboratory lightly. He had one of the first in the state of Kansas, and in 1902 read the first paper on that subject offered to the Kansas Medical Society. In the concluding paragraph of that paper he said as follows (the quotation is from memory): "There are two men who err greatly in their estimate of the value of the clinical laboratory; the one who ignores it, and he who would substitute it for physical findings and history." Further observation has, of course, only served to confirm that opinion, and nothing is more certain than that the clinical laboratory had not been an unmixed good. Indeed, it is a debatable question whether more good than harm had resulted, to date, from its introduction into medical practice. The work is so attractive, and usually so easy withal, and has such a commandingly scientific appearance, that one is often lured away from the physical findings and history and the painful exercise of gray matter, and confidently submits to what an eminent surgeon, realizing this danger, calls a "nickel-in-the-slot diagnosis."

An elderly physician in a large city said one day: "There is not a man in this town under thirty-five years of age, who dares make a diagnosis of typhoid fever without a Widal." It is to be hoped that he underestimated the number, but there is certainly an alarming propensity to trust everything to a chemical or biological examination. And now that the word has gone out that twenty per cent. of the Widal's prove erroneous, one is hard put to it to know just what the men who have been depending exclusively on that reaction are going to do.

But typhoid and the Widal are of comparatively little importance, and soon over. What of syphilis and the Wassermann? When the Wassermann test was announced it was generally accepted as absolutely reliable, and a positive Wassermann was accepted as a demonstration of syphilis. Here's an example that came under the Old-timer's observation a few years ago. An unmarried woman of 50, employed in a position of great responsibility in a large mercantile house, began to suffer from severe headaches. The physician she employed gave her palliatives which brought no permanent relief, and she employed Dr. X., who made a blood count, and found three and a half million reds. This, of course, ought to have given him a pretty strong hint as to the cause of the headaches. But he did a couple of Wassermann's. The first was negative, the second slightly positive. Dr. X. immediately made the awful announcement

that she had syphilis, and gave her three injections of arsaphenamine. But the shock of the disclosure, added to her other burdens, was too much. One day she fainted in her office, and as soon as she was able to travel went to a more salubrious climate for a long rest. During her absence she came across an old physician who had been a lifelong friend of the family, and one day told him her trouble, including the diagnosis. Inquiry by the doctor, who will be referred to as Dr. Y., disclosed the absence of any of the cardinal symptoms, for which Dr. X. had not sought.

"Forget it", said Dr. Y. "Your headaches were anemic headaches."

A few months later, being in the town where his old friend had lived, and recalling the case, he sought out Dr. X., and opened the discussion.

"I think, Dr. X.", said the visitor, "that you were mistaken in your diagnosis."

"Absolutely not," was the reply.

"What did you base it on?"

"A positive Wassermann."

"No history of secondary symptoms, eruption, throat trouble, falling of the hair?"

"Not at all necessary. I had a positive Wassermann."

"But," continued the visitor, "we get a positive Wassermann in other conditions than syphilis, in anemia, for instance."

"O, she didn't have anemia to hurt."

"She had three and a half million reds."

Dr. X. came back triumphantly. "But," he cried, observe the result. She's perfectly well."

"Yes, Doctor, rejoins the visitor, wearily, "Arsenic is the classical remedy for anemia." And that ended the discussion.

Not all cases where a "nickel-in-the-slot" diagnosis has been made, end so happily. What of the countless number of innocent men and women whose lives have been crushed by such a diagnosis made by a man who has taken a six weeks' course and "does his own laboratory work?"

That is one reason why the Old-timer thinks that the clinical laboratory, an adjunct of great value to a man who uses it as an adjunct, has on the whole done more harm to date than it has done good.

The Old-timer cannot but wonder how much the schools may have been to blame for this exaltation of the laboratory, and the consequent neglect, comparatively speaking, of observation, and the art of reasoning from cause to effect. Said a young doctor the other day: "Why, this man talks like a Philadelphia lawyer." He was reading a careful analysis of a series of cases of pneumonia treated in a large hospital. He was asked what he would have. He wanted the mortality record. Of course the mortality was stated, but the fact that that observer reasoned about his cases seemed to the young man entirely out of place.

The best appreciation of the value of a Wassermann (and this will apply to most laboratory tests) came the other day in conversation with a colleague many of whose seventy-odd years have been given to teaching. On being asked his opinion, the doctor said: "The man who went out as you came in was referred to me for a diagnosis. In his youth he was engaged in an occupation which exposed him in an unusual degree to temptation to promiscuous sexual indulgence. That did not mean that all engaged in that occupation are immoral, but it was a hint. I could not ask him if he had had syphilis, on account of the presence of his wife. His wife's first pregnancy was terminated by a miscarriage. There is nothing conclusive about that, but it is another hint. On giving him the

barium meal I found the esophagus greatly distended, terminating in a severe stricture at the gastric opening. That may be due to malignant disease, but it is sometimes found to be of syphilitic origin. Now I am having Wassermann made. If it is positive, I shall have another bit of evidence, and shall make a diagnosis of probable syphilis."

The clinical laboratory is slowly coming to its proper place and in a few years will cease to be the fetish of the ignorant or mentally lazy, whose dictum overrides observation and careful reasoning.

During the last fifty years sanitation and the stamping out of infectious diseases have functioned tremendously for human welfare, and have added several years to the average duration of life. It is found, however, that this higher average is due wholly to the saving of children, and the statement has often been made that deaths from diseases incident to later years are increasing the proportion to the population, and the responsibility for this is placed at the door of the increasing strenuousness of our modern life. This may be true in part, but certainly not wholly, and the Old-timer begs to suggest that as exactly one hundred per cent. of those saved from death in childhood must die of some disease incident to later years, and that as the mortality from those diseases is less than a hundred per cent. of the whole population, the addition of a considerable number of people that shows a mortality of exactly a hundred per cent. must inevitably bring up the general average.

But while we have been making these advances in diagnosis and preventive medicine, (and there can be no doubt that with all their failures and misinterpretations they are real advances), what about the treatment of actual disease? The one thing for which the true physician strives is the welfare of his patient—the "saving of life and the relief from suffering."

The science and art of medicine (and this is probably true of every line of human endeavor) has never advanced steadily along its whole front. And there have been eddies in the stream. Some of these eddies have been marked by the rise of cults, as christian science, osteopathy, chiropractic, etc., who have taken up lines of treatment formerly used intelligently, but now abandoned, by physicians, and have endeavored to apply to all diseases that flesh is heir to. The old physician of a hundred years or more ago, who told his nervous, worrying patient to go home, read her Bible, and trust God, practiced wisely a true christian science, for it was christian and scientific. And there was a time when the physician regarded the art of massage and manipulation as part of his regular work. This is so no longer, except in sanatoria. As the physician has discarded them, the cults have picked them up. They have done much good. They have also done much harm. It is very difficult indeed for a physician, however, open minded he may be, to see any benefit to the typhoid or tuberculosis patient from the vigorous handling of the osteopath or chiropractor, and the christian science "healer" who calmly assures his or her patient, suffering from a fulminant appendicitis or an empyema that there is nothing the matter, is beyond the denunciation of one whose vocabulary is as limited as that of the Old-timer. In all probability, if the medical profession had continued the use of these psychological and manipulatory methods of treatment in indicated cases, these cults would not have arisen.

The question has often been asked: "What are we going to do?" A few months ago the Old-timer was in the office of a confrere who divided the reception room with an osteopath. The doctor was out, but the osteo-

path was friendly, and the conversation developed the fact that he confined his practice to cases that might be benefitted by the methods of treatment in which he had been trained, referring the others to the physician, who in turn referred cases to him which were amenable to his line of treatment. If all physicians, and all devotees to the cults were as open-minded as were these two, the above question might easily be answered.

But synchronously with these losses has come a gain in the saving of life and the relief of suffering, a gain so vast that it can scarcely be measured, and which promises even greater gain for the future-serum and vaccine therapy.

About thirty years ago a remedy made its appearance on the market, labeled "antitoxin", recommended for use in diphtheria, the most terrible disease known to our times. When its advent was made known in city or village mothers looked on their little ones and shuddered. There seemed no escape. Large families were swept away, and it was not unusual, after the abatement of an epidemic, to find the death-toll run as high as fifty per cent. of those attacked. And while in most infectious diseases one attack gave practically a life-long immunity, there was no such promise in diphtheria, immunity from which was very short-lived indeed.

It must be difficult for one whose memory does not run back to those days to realize the horror with which the disease was universally regarded.

As usual, the new remedy encountered strong opposition, and of course that opposition came oftener and with most telling effect, from the seats of authority. They who occupy those seats are in a superlative degree the guardians of the public welfare, and must scan very closely everything that has to do with that welfare. They must denounce everything that is inimical to that welfare. Unfortunately, they are not always happy in their decision as to what is inimical. They were not happy in their verdict against Lister in his fight for antiseptics, nor were they happy in their denunciation of Holmes when he issued his forceful warning against going from a case of childbed fever to a normal confinement without a thorough cleansing. And they were unhappy in their estimate of the value of the new antitoxin. The medical literature of that day teems with denunciation of the deadly brew, of a kind never before heard of, of which impossible things were promised. It was administered to dying children, in small doses, and when the child died was accused of hastening the death. When a child recovered, after the exhibition of the remedy, they said, however prompt and dramatic the recovery, that one swallow does not make a summer. If a series of brilliant successes were reported, they were declared, by men in responsible position, who knew nothing whatever about them, to be erroneously diagnosed, or the epidemic was declared to be very mild.

More might be said. But forbearance is a virtue, and a brilliant case of the exercise of that virtue is before the reader at the present moment.

Antitoxin won the fight, of course, and in a few years there were no more objectors. What had become of them? Why, they were busily engaged in lauding the value of antitoxin, and lecturing on the tremendous progress that medicine had made in recent years. Well, that made it unanimous, and no one was hurt, and the public got the benefit, and everybody was happy.

It was hoped that as brilliant results might be achieved in other infectious diseases, but this hope has not been realized. While something has been accomplished, there

is no comparison in efficiency with the antitoxin for diphtheria.

About the time antitoxin won its great victory, another remedy, closely allied to the sera, appeared—the bacterial vaccine. Dr. Almóth E. Wright, of London, afterward knighted for his contribution to science, announced that the killed germ, properly introduced into the system, tended to bring relief from the disease caused by the living germ. It was pointed out that while the serum supplied readymade antibody from the immunized animal from which the blood was taken, the vaccine stimulated the patient's own tissue cells to the production of antibody. At first, Sir Almóth Wright recommended its use only in chronic cases, apparently inclining to the belief that the introduction of the vaccine in acute conditions would only increase the intoxication. In a short time, however, his attention was attracted to some reports from India, where the vaccines had been used in acute cases. On carefully trying them out, the views from India were confirmed, and he has since constantly advocated the early use of vaccines in indicated cases. Like the diphtheria antitoxin, the vaccines were recommended for their immunizing as well as their therapeutic properties.

The vaccines, if the Old-Timer's memory is accurate, were accepted very generally, and high hopes were entertained that a remedy had been found that would show as marked a degree of efficiency as had diphtheria antitoxin. These hopes were doomed to disappointment, at least for a time. The one exception to what seemed a general failure, was the immunizing effect of the typhoid vaccine. This efficiency has never been seriously disputed, and in the most virulent denunciations of vaccines, this has been excepted.

The killing of the germ and its suspension in a salt solution was so easy that it was done in a thousand laboratories, with varying degree of success, that is, as to the retention of the therapeutic qualities, and the budding faith in vaccines other than typhoid was early visited by a severe frost. It was found that the germ contains two therapeutic agents, the protein and the enzyme, both of which are seriously affected by a degree of heat necessary to destroy the life of the germ.

But wise and persistent efforts have wrought a marked change, and the careful use of heat, so as to avoid as far as possible its injurious effect and of the use of chemical reagents which destroy life without detriment to the antigens, have enabled the makers to produce a vaccine far more potent than were those of an earlier date. In the meantime much has been added to the knowledge of their administration. Reports are received from men of known ability and integrity indicating a greater efficiency in their use, and the critics are admitting their value in furunculosis, acne, and even whooping cough. Recently reports of the favorable effect of vaccines in pneumonia have come in such volume, and from such sources, as to command the attention of all intelligent men, and which indicate a close approximation to the striking success of diphtheria antitoxin, in the treatment of the disease which today causes the greatest mortality in the human family, pneumonia.

No doubt that much remains to be learned, and it may well be that the next few years will see marked improvement in the preparation as well as improved skill in their use.

For several years the post-graduate schools have given instruction in vaccine therapy, and now this subject is finding its way into the curricula of some of the under-

(Concluded on page 301)

Some Phases of Septal Surgery

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Overcoming the barriers to progress in otolaryngology rather resembles the disentangling of a knot—one opens out a loop here and there, and then halts, to proceed in another direction. It is perhaps some years now since marked progress has been made in the field of septal surgery beyond the points obtained by Killian, Freer, Ballenger, Mosher and others, but during this time, the fields of tonsillar technique, focal infection, direct laryngoscopy, pituitary study, and even with renewed attack, the problems of the middle ear, have absorbed attention. It, therefore, may not be amiss to bring up for discussion again, in the light of continued experience, some phases of the submucous correction of the septum.

It is perhaps safe to assume that in this day septal surgery is almost synonymous with submucous technique. To discuss the general procedure in submucous operation would be unworthy the members of this section. It is simply my purpose to rather fearlessly present two or three phases for discussion which have seemed of special significance. These might be designated as:—(1) Operative indication; (2) Operative election; and (3) Physiologic reaction.

(1) Operative Indication.

There can be but one fundamental purpose in view,—that of maintaining or restoring, when lost, the normal physiology of the nose, and we are here interested only in so far as the septal anatomy or the anatomic pathology is concerned. This, furthermore, is only concerned in its contribution for or against bilaterally equal ventilation—for this is primary in its consequence to nasal health. Other nasal disturbances—catarrhal discharge, vitiated olfaction, sinus congestion, etc.—are secondary not in consequence but in order of procedure. The discovery, however, of septal abnormality proceeds from secondary, or distal factors—the evidence of pharyngeal infection and obstruction; the search for cause of deafness; exacerbations of sinus congestion; and only infrequently upon the occasion of routine prophylactic examination.

The eye calls for attention by immediate symptomatology of ocular symptoms; the teeth are being given almost inordinate attention in these latter days—but unfortunately the nose is only discovered when its secondary consequence has arrived—and that more often a well advanced tubal disturbance. This point might deserve special emphasis—the septal factor is not usually recognized until its secondary effects are fully organized; and its surgical treatment, be it ever so clever, is not entirely retroactive in result.

The first impulse of the rhinologist upon the discovery of deflection, spurs, ridges anterior and posterior, osteomata, is to clear these up by complete resection, if patient is submissive. The assertion may be made that, other things being equal, only good can result from such procedure; but its effect is in large measure preventive of further encroachment of nasal disease, and much discussion has arisen as to the ruthless and unnecessary surgery of the septum to relieve non-suppurative otitis media of chronic type, and the almost inevitable failure to relieve tinnitus and deafness.

Beck in describing his operation, submucous re-

section, has given the indications as, “nasal obstruction to breathing, ventilation of the sinuses, and middle ear, and to correct certain nasal deformities.”

This at once raises the question as to just how far nasal obstruction is contributory to otitis media, and of how much real value the time worn phrase “rarefaction in the fossa of Rossemuller” is tenable. Experimental study of negative and positive intranasal pressure has been reported by Mink, Goodale, Spicer and Durkee, the latter having investigated a series of cases with manometer tracings on revolving drum. He found that negative air pressure in the nose and naso-pharynx during inspiration, with the mouth closed or open, or during the act of swallowing, was not a cause of ear disease, the negative and positive pressures during inspiration nearly balancing even with an obstructed condition; and conversely, that the determining of nasal air pressure was of no great value in diagnosing the degree of nasal obstruction. Equally important studies were made in 1915 by the New York State Commission, on ventilation, which, by the use of the improved Glatzel mirror, experimentally determined from the deposit areas of moisture, the effect of atmospheric conditions, temperature, humidity and air movement upon the respiratory tract; the majority of changes being in increased swelling, moisture and redness, and with the resultant conclusion that the theory of bacterial infection as the sole cause of catarrhal inflammation was untenable. Both of these factors have an important bearing upon the contribution of nasal obstruction to tubal disturbance. It is evident, however, that the first effect of an obstructed passage is to produce congestion and chronic hyperplasia; the second effect to lock off sinus drainage and produce rarefaction of oxygen in the sinuses, and consequent attenuation of the membrane, if not acute infection. The next effect in all probability is to continue this hypertrophy and infection into the tube, as may be demonstrated by the routine use of the naso-pharyngoscope. Cause and effect seem logical but a well defined adhesive type of otitis media will probably be little changed by any septal surgery—in fact, often not affording the apparent amount of relief by careful routine per tube and aural canal, especially if this be accompanied by a painstaking research into and reorganization of the patient's cardio-vascular and nutritional apparatus.

But are those who condemn septal procedure unwilling to admit that a nares made healthy in its physiology, will not contribute most in fortification against further advance in disease, and, also, that this procedure in careful hands, while a most skillful operative one, is remarkably free from serious shock or other danger to the tissues?

It was not the intention here to cover the field of submucous surgery or conduct its defense, but rather, through the foregoing prelude, introduce a special phase of the subject for discussion. Most of our submucous, or other septal operations, have been done on adults; often on patients we have been watching from childhood, fearful of disturbing external contour from too early interference. But little has been reported on distinctly juvenile septal surgery, although Rosenheim reported successful work in several cases from ten to fifteen years of age. By

the time this is usually done, however, as suggested above, fixed changes have occurred and treatment will be only partially remedial; and in honesty prognosis should be given as a chiefly preventive one. *If such correction is indicated*, should it not be obtained early enough in life to antedate sinus and auditory change? The citizen of to-day has been rapidly educated to a new view of child hygiene. The creation of the draft examinations have shown the overwhelming importance of establishing early examination and laying the adequate foundation of physical training during the formative period between five and twelve years of age. Quite likely this is in large measure due to the active propaganda of pediatricians whose function seems to be increasingly that of preventive oversight of the child during its earlier years. The initial function of the special sinuses, all so dependent on the naso-pharynx, is surely almost as important as the care of nutrition, respiratory, cardiac or neural apparatus.

If such were possible, the logical procedure would be to determine the causes for septal distortion and eliminate the factors involved. Most of this belongs in the field of odontology. Freeman has stated that 290 out of 302 cases (96 per cent) of septal obstructions were found to have high arched palates, and incisor eruption as well as imperfect molar adaptation (the former through development of the premaxillary bones and the latter from relation to the horizontal portion of palate bones) are factors in the upward push, bending the soft septum against an unyielding cranial base. Much has been written on this question of obstruction etiology.

Ballenger reviews the views of Loewy on rhachitis; Trendelenburg on lack of development of maxillary bones; Morgagni on the excessive development of the vomer; Bosworth on traumatism; Talbot on unequal development of adjacent bones, especially turbinate and facial.

Mosher, in his masterly research presented before the A. L. R. & O. Society in 1907, while making a proper plea for traumatic share, and reviewing the prior work of Sieur and Jacob, clearly demonstrates the part played by asymmetry due to inequality of growth of the hard plate, superior maxilla, palate bones and premaxillary bones. It does not seem, however, that beyond the field of orthodontia measures of relief have been very freely offered. Cases are constantly observed under the age of twelve where, by tactful and repeated examination, a clear diagnosis of abnormal septum may be obtained, often with well marked degenerative changes in the turbinates, but real difficulty is presented in demonstrating obstruction at an age when examination is difficult. Tonsils and adenoids may be successfully removed and still the chronic rhinitis will persist. Many ingenious devices will apparently give some aid in registering the breathing capacity of the two sides, but, as stated above, intranasal pressure cannot be accepted as diagnostic. The use of the mirror, powder films, pendulum wisps of cotton or feather, breathing into a chemical mixture, tambour registration to vibrating needle, have all been suggested and might be helpful, if repeated sufficiently, in demonstrating temporary congestion, and if observed at home during sleep. But in the last analysis, decision must be based upon actual examination. When such diagnosis is positive, are we not justified, during this plastic age, in correcting the deformity which has dislodged the vomer from its socket, or fractured its wings, producing the long horizontal ridge at attach-

ment of vomer to perpendicular plate and quadrilateral cartilage, or deflected the septum vertically at the junction of the two latter. Mosher has made the statement, and his authority is strong, that the septum is not fully ossified until the eighth year, and the premaxillary wings do not fuse with the tip of the vomer until the fifteenth year.

It has been my opportunity to make a large number of routine nasal examinations in boys from six to eighteen years of age, and the records show a very considerable percentage of vitiated position. In 67 cases recently reviewed, without reference to the later report, 22 per cent presented marked, 25 per cent moderate and 7 per cent slight septal obstruction; only 46 per cent were normal—and the subjects were of rather high type. This would seem to inevitably point to later involvement of sinus areas, if not surely inducing tubal sequence. The developmental factors in etiology may perhaps be avoided, but once established, are difficult to reverse. What solution, therefore, may be adopted? By fragmentary submucous work under careful illumination, scarcely actually removing any cartilage or bone, the abnormality may be corrected, perhaps wisely over corrected, and at this early age it quickly reattaches in corrected position. It would not be difficult to correct such septums when removing adenoids, not complicated by other disease conditions. The few cases in the writer's experience, perhaps 25, while not observed over too long a period of time, have shown remarkably quick response to surgery involved, and it would seem worth while to carefully observe a considerable number in the clinics over several years' time. In such adolescent correction, another phase of the subject presents itself,—namely the correlation of external and internal deformity subsequent to traumatism. In fact, this applies to adult surgery with equal force. If the nose is displaced externally, there is almost certainly compensatory interior deviation and many submucous procedures while leaving a flexible membrane, leave at the same time a most unsatisfactory hang in the septum with a passage in the area of the nasofrontal duct practically as narrow as prior to operation. In about twenty cases of external nasal correction, the separation of nasal process, of superior maxilla, by chisel, was attended with little shock or trauma, and the five millimeter scar even in adults, promptly disappear.

Careful inspection and alignment down from the internal canthus demonstrates an external displacement perhaps but little previously noticed by patient's family, yet profoundly etiological in nasal inequality. Often the septum maintains proper alignment after external correction alone and, in view of frequent failures without such procedures, one would be more often justified in accepting this method and combining with it an upper or lower linear resection internally. In the younger children who accept traumatic injury so often and so graciously, and in whom replacement is more readily obtained, correlated deformity might be more often corrected.

(2) Operative Election.

Presented a nose with more or less distortion of the septum and perhaps defined involvement of turbinate areas on one or both sides, what procedure shall be adopted? Of fundamental importance would be a radiographic study of the nasal cavity and accessory sinuses with, if possible, a differentiation of exudate in the anterior and posterior ethmoidal cells.

The existence of septal deflection, ridge or spurs coincident with the generative changes in the turbinates does not necessarily prove which was at initial fault. An x-ray plate is often necessary to determine whether the septum is actually out of place or such appearance is presented from hyperplasia of the septal membrane on one or both sides, and the personal equation is important, as the operator's special preference to and experience in sinus work or in septal work may, in a certain measure, magnify the importance of each. The infantile processes involved in the production of the deformity would seem, however, to emphasize the initial septal fault, and if antra and frontal sinuses are not involved and exudate be limited to the anterior group of cells, should not the septum be first considered rather than lateral ethmoidal areas, even in presence of almost cystic inferior turbinate in opposite concavity and surface degeneration of middle turbinate structures? With badly distorted septum, trouble will continue even after inferior half of middle turbinate has been excised, or hypertrophied turbinate incised or cauterized. We realize how often this procedure is not followed, and the question often arises when patients, still unrelieved symptomatically, present with picture and history of sinus excenteration, "Why was this septum not corrected?"

The counter objection will be presented that active infection in sinus areas will endanger the field of operation. This is entirely possible—yet one cannot but marvel at the natural immunity always present in nasal cavities, which guards operative technique. The writer is under the impression that most rhinologists respect this natural provision for safety and hesitate to spray or wash out secretions to any extent prior to the submucous operation. The only answer to this objection is that such infection usually does not appear—although infective germs must always be present in greater or less degree.

It is logical to proceed along physiologic lines and to attack the root before the branch. The question is presented for discussion as to whether or not suspected sinuses are not more often automatically relieved after orthopedic work upon the septum than the reverse. It is often surprising how much trouble will be produced by a simple synechia from the septum to the lateral surface of the nose.

(3) Physiologic Reaction.

This title as here applied, refers to that physiologic reaction or shock in the patient under septal operation, an area so involved in special sense correlation. It is not the purpose here to discuss the chemistry of nasal secretion or the histologic changes in mucous membrane.

Most excellent work has been done upon such lines, as for example the exhaustive study of the lymph drainage in the nasal cavity, accessory sinuses, etc., reported by Mullin with further reference to the researches of André in France.

In this valuable, frequent and readily performed operation, we are all concerned in minimizing the element of shock to the patient. Its frequency and popularity, as in the case of appendix and tonsils, minimizes the psychic side of auto-suggestion, but one or two suggestions from experience may induce many in discussion. In other words, here is an operative procedure simple for the skillful operator. How can it be made even more simple? To one who has been working along this field, it is a little difficult to recall how much of the procedure is even par-

tially original and how much impressed in the observance of the skilful performance of others. Under this heading might be included the effect of anesthesia, hemorrhage, meningeal safeguards, factors in simplifying the septal reconstruction.

First, as to the position of the patient, which recalls an early reference by Beck;—assuming that the rhinologist can coordinate himself to whatever is necessary, and orient the line of the nasal bridge in any position, the prone position would seem the right one to ease nervous strain in the patient. His head rests instead of being held muscularly, blood naturally determines to trunk centers and syncope is less frequent. Unwonted movements are less frequent to disturb vision or instruments of operator. A slight elevation of head rest would aid this vision without changing the general plane.

Secondly, as to anesthesia;—It has not been my fortune to succeed in, nor have I witnessed, the successful nasal bloc in infiltration anesthesia. Dental experience has proved its efficacy and it ought to succeed in the nose. When all is said, there still lingers an underlying distrust of the safety of cocain used in sufficient percentage strength to really make an absolutely painless procedure.

The operator frequently varies from one to the other method influenced by some startling experience, although serious toxemia seems rare. It is important in cocain anesthesia to get a rapid surface effect and prevent a slow absorption. Many writers have urged the use of cocain powder rather than solution of some special strength, but perhaps all have noted that peculiar reaction in the patient which sometimes occurs at the point of beginning numbness in incisor area; sometimes with the first forcible passing through the bony plate of the ethmoid. The patient perspires, blanches, and feels sick. Many operators disregard it, but others give it the diagnosis of cocain toxemia. Possibly analogous in its effects only, is the temporary pneumogastric halt noted at the time of actual separation of the tonsil under operation. The cautious operator will be provided with ammonia and stimulant ready in hypodermic for such emergency—which, of course, only occasionally comes. A fatality in this procedure which is regarded as immune as in the biblical assurance on childbirth, would be startling and depressing enough. So why not train ourselves to work a little more frequently in this field under our tried and true friend, ether anesthesia. As experience in fifty or more cases has proven that the procedure is not difficult, especially with the use of a delicate suction tube, and all results have been as satisfactory as in the slower procedure under local anesthetic, and patients these days will readily accept ether. A thorough application of adrenalin prior to, not during anesthesia period, often affords a nearly dry field and our movements in this operation, which so lends itself to precise technique, ought to be nearly automatic.

An experience of three serious nasal hemorrhages, occurring from eight to ten days subsequent to operation, both normal in vascularity, has left its impress. Careful preliminary tests of coagulation time, especially intravenous ones, indicate fibrin normality, but do not reveal the possible variance in action of the vessel wall. The amount of blood lost, occurring from such a frankly visible and mucoid area is always exaggerated, but the mental strain to the patient is positive. Many possible device, intranasal and post-

(Concluded on page 301)

Has Congress the Power to Determine the Alcoholic Contents of Beverages Under the 18th Amendment?*

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It is with a feeling of trepidation that I undertake a discussion of the power of Congress to determine the alcoholic content of beverages which can be sold under the provisions of the 18th Amendment, for apparently few people can calmly, or sanely, discuss any question which even borders on the prohibition question.

At the outset, however, let me assure you that no attempt is to be made to attack or defend the present statute, nor will the effect of national prohibition be discussed in any of its phases.

Rather the discussion will be devoted to the legal question as to the power of Congress to determine the alcoholic content of beverages without regard to the wisdom either of the continuance of the present standard or its liberalization.

It must be recognized that this question is not a theoretical one. Bills are now pending before Congress to legalize the sale of beverages containing a much greater percentage than that now established as the standard. The recent poll taken by the *Literary Digest*, although confined to people ordinarily conservative, showed that 61 per cent of them favor legislation that will permit the sale of beer and light wines; and more recently one of the great parties in this state has put such a declaration in its platform—while the platform of the other great party is silent on the subject.

It is true that a certain group of our citizens denounce as "Nullifiers" all who would change the present standard of $\frac{1}{2}$ of 1 per cent; while another group advocate the total repeal of the present statute, known as the Volstead Act, as well as the repeal of the amendment itself.

These brief references sufficiently show that the question is a real one.

It is apparent that if Congress can constitutionally enact a statute permitting the sale of light wines and beers, those who desire a liberalization of the present enforcement act can obtain their object by a mere Congressional enactment.

On the other hand, if Congress is without this power, repeal of the 18th Amendment will be necessary before a change could be made.

Before discussing the Amendment and the Enforcement Act, we must visualize the situation in these United States prior to the enactment thereof.

Most of the states were "dry"—that is, they prohibited by statute the manufacture or sale of malt, vinous or spirituous liquors. Many other states were similarly "dry" in spots under local option laws.

In practically all of these states statutes prohibiting the manufacturer and sale of intoxicating liquors had been declared constitutional by their courts of last resort and these decisions had been affirmed by the United States Supreme Court. Congress had enacted and the Supreme Court had sustained a statute forbidding the shipment of any intoxicating liquor into any state the laws of which forbid its possession or sale.

In fact, the State Courts had in many cases sustained statutes which prohibited the sale of beverages which were admittedly non-intoxicating, the courts refusing to consider whether or not such beverages were intoxicating

in fact, that is to say, whether or not the ordinary use of such beverages would produce intoxication in the average man. The courts held that they were bound by the Legislative fiat that the non-intoxicating liquors were intoxicating.

Certain Enforcement Acts (of which the Acts of North Dakota, Wisconsin, Iowa, Missouri and Alabama may be taken as examples), went even further and prohibited the sale of a certain class or classes of liquors which admittedly were non-intoxicating. This power of the Legislatures of those states was upheld as constitutional on the ground that if in the opinion of the State Legislature, such prohibition was necessary to enable the state to enforce its statute against the sale of intoxicating beverages, then the Legislature possessed the power to prevent the sale of the non-intoxicating beverage, the sale of which might be used as cloak to cover the sale of the prohibited beverage.

A logical deduction from the decisions in these cases would be, as Judge Anderson points out in his dissenting opinion, in the case which held such an Alabama statute to be constitutional (*Elder vs. State*, 162 Ala. 41), that if the sale of certain non-intoxicating drinks can be prohibited regardless of the name under which they are sold because they resemble certain intoxicating drinks, why then the Legislature may lawfully prohibit the sale of iced tea because it resembles whiskey as does ginger ale, cider and many other harmless beverages.

The Supreme Court of the United States had held that such statutes prohibiting the sale of non-intoxicating drinks by state legislation did not infringe the prohibition of the 14th Amendment against taking liberty or property without due process of law (*Purity Ex. & T. Co. v. Lynch*, 226 U. S. 192).

So we see each state was as "dry" as it wished to be, and its Enforcement Act as drastic and effective as its citizens demanded; its police power was practically without limitation in controlling the manufacture and sale of intoxicating liquors.

It might here be added that if the 18th Amendment were repealed, this would again be the situation: that is, the question of prohibition would again be for each state to decide for itself.

In spite of this absolute power reposing in them to prohibit, if they so desired, the manufacture and sale of intoxicating liquors certain states remained "wet" and this brought about the efforts for National Prohibition.

The first Federal Acts which affected the manufacture of malt or spirituous liquors were the Lever Act and the War Time Prohibition Act. Both were war measures, both were passed under the constitutional powers of Congress to raise and maintain armed forces and declare and carry on war.

The Federal Government had no police power for this was not delegated by the states when the Union was formed and, therefore, prior to the enactment of the 18th Amendment, it had no direct power derived from the federal constitution to control such matters.

The only power that the Federal Government now has to control the manufacture and interstate sale of intoxicating liquors is found in the 18th Amendment and while we daily hear on the streets discussions in regard to this Amendment, we may well read it here. It reads as follows:

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"Section 1. After one year from the ratification of this article, the manufacture, sale or transportation of intoxicating liquors within, the importation thereof into, or the exportation thereof from the United States and all territory subject to the jurisdiction thereof for beverage purposes is hereby prohibited.

"Section 2. The Congress and the several states shall have concurrent power to enforce this article by appropriate legislation."

For our purpose tonight, we are going to eliminate all questions except those embraced in the words of the Amendment which in effect require Congress to enact laws to prevent the manufacture, sale, etc., of "intoxicating liquors for beverage purposes." It is vital, to an understanding of the Amendment, to note that the Amendment does not prohibit the manufacture or sale of alcoholic liquors or beverages containing alcohol. The Prohibition is solely against "intoxicating liquors." Many beverages contain alcohol without being intoxicating, while certain liquids are intoxicating which do not contain alcohol.

Our question, therefore, is what does the Amendment mean when it says "intoxicating liquors?" It contains in itself no definition, and, therefore, the words "intoxicating liquors" are to be given their ordinary meaning, pursuant to the first cardinal rule of construction.

Lewis' *Southerland*—Stat. Con. 2nd Ed. Pg. 749.

Enderlich *Interpretation of Statutes*, Pg. 4.

What is the ordinary meaning of the words "intoxicating liquors?" An intoxicating liquor is a liquor which produces intoxication. Intoxication is the state of being drunk. In other words the final test of whether a liquor is or is not intoxicating will be whether or not the use of such liquors would produce intoxication.

In interpreting any enforcement act adopted by Congress under the 18th Amendment it must be remembered that the sole power of Congress is found in the power delegated to it by the Amendment. While, as has been pointed out, the states had under their police power authority to prohibit the manufacture and sale and even possession of intoxicating liquors and the further power to prohibit the manufacture and sale of liquore not, in fact, intoxicating when the State Legislature thought such a prohibition necessary.

The federal power as delegated would seem not to include this additional power. Therefore the limitation would seem to be that while Congress would have the right to prohibit the manufacture and sale of intoxicating liquors it would not have the power to prohibit the manufacture and sale of non-intoxicating liquors, because such power had not been granted to the United States by the several states.

The Supreme Court of the United States has, however, by a vote of 5 to 4 held that under the war power, Congress not only had the power to prohibit the sale of intoxicating liquors, but that it also had the same power as the states, to wit, a police power to prohibit the sale of non-intoxicating liquors where it clearly appears that the sale of such non-intoxicating liquors is necessary to permit the effective enforcement of the statute which forbids the sale of intoxicating liquors. (*Ruppert v. Caffey*, 251 U. S. 260). So the Supreme Court has held that under the war powers of the United States, Congress could prohibit the sale of alcoholic liquors, not intoxicating in fact, this power being implied because deemed necessary and proper to carry into execution its power to declare war, to raise and support armies laws necessary and proper to carry into execution the foregoing powers.

The court reasoned that Congress has an implied

power to prohibit intoxicants because the Constitution makes the will of Congress supreme in all matters affecting the national defense in time of war and Congress might well say that the sale and use of intoxicants during a war was inimical to the best interests of the nation. Having this implied power the court then said Congress had a still other and further implied power to prohibit the manufacture and sale of beverages, not in fact intoxicating, in order to insure the effectiveness of the prohibition against the sale of intoxicating beverages.

The dissenting opinion in the *Caffery* case points out the danger of this reasoning. Mr. Justice McReynolds, who wrote the dissenting opinion, says:

"The query at once arises: If all this be true, why may not the second implied power engender a third, under which Congress may forbid the planting of barley or hops, the manufacture of bottles or kegs, etc., etc.? The mischievous consequences of such reasoning were long ago pointed out in *Kidd v. Pearson*, 128 U. S. 1, 21, 32, L. ed. 346, 350, 2 Inters. Com. Rep. 232, 9 Sup. Ct. Rep. 6, where, replying to a suggestion that under the expressly granted power to regulate commerce, Congress might control related matters, it was said:

"The result would be that Congress would be invested, to the exclusion of the states, with the power to regulate not only manufactures, but also agriculture, horticulture, stock raising, domestic fisheries, mining,—in short, every branch of human industry. For is there one of them that does not contemplate, more or less clearly, an interstate or foreign market?"

It therefore appears that if this 5 to 4 decision be followed the court will naturally find that now that the 18th Amendment has given to Congress the definite right to prohibit the manufacture and sale of intoxicating liquors—that from this expressly delegated power may be implied the power to prohibit the manufacture and sale of non-intoxicating liquors where in the opinion of Congress such prohibition is necessary for the enactment of the statute.

Whether or not the Supreme Court will, as suggested by the minority opinion in the *Ruppert* case, imply from the delegated power the right to control the planting of barley or hops, or the manufacture of bottles or kegs, remains an open question—or whether or not the *Ruppert* case will be followed by a subsequent court is a matter of distinct opinion. We cannot say that this case was fully approved in the *Rhode Island* case (*Rhode Island v. Palmer*, 253 U. S. 946) for the majority of the court gave no reasons for their opinion and therefore it cannot be said whether or not the court sustained the *Volstead* Act as prohibiting the sale of an intoxicating liquor or whether it sustained the *Volstead* Act under an implied power to prohibit the sale of non-intoxicating liquor because the sale of such non-intoxicating liquor might interfere with the enforcement of the Prohibition Amendment.

The *Rhode Island* decision, which held constitutional the *Volstead* Act, is remarkable for the fact that while this case was argued with six other important cases together involved the validity of the adopting of the Amendment, its construction and many other important questions, the decision of the majority of the court was but a brief statement of conclusions.

The only expression of the court touching the right of Congress to fix the alcoholic percentage of beverages which shall be deemed "intoxicating liquors" is found in the 11th Subdivision of the Decision which reads as follows:

"11. While recognizing that there are limits beyond which Congress cannot go in treating beverages as within

its power of enforcement, we think those limits are not transcended by the provision of the Volstead Act (Title II. 1), where in liquors containing as much as $\frac{1}{2}$ of 1 per cent of alcohol by volume, and fit for use as beverage purposes, are treated as within that power, *Jacob Ruppert v. Caffey*, 251 U. S. 264, Ante. 260, 40 Sup. Ct. Rep. 141."

No reason is given for this decision and, therefore, no one can determine how this conclusion was reached. Mr. Chief Justice White, in commenting upon this, said:

"I profoundly regret that in a case of this magnitude, affecting, as it does, an amendment to the Constitution dealing with the powers and duties of the National and State Governments, and intimately concerning the welfare of the whole people, the court has deemed it proper to state only ultimate conclusions, without an exposition of the reasoning by which they have been reached."

The Rhode Island case simply decides that Congress can prohibit the sale of a beverage which contains more than $\frac{1}{2}$ of 1 per cent of alcohol.

Reading this decision in the Rhode Island case in conjunction with that in the Ruppert case, it will be found that Congress can prohibit the manufacture and sale of a beverage which contained $\frac{1}{100}$ of a per cent of alcohol; for when the court said in the Rhode Island case that "while recognizing that there are limits beyond which Congress cannot go in treating beverages as within its power of enforcement," it apparently meant that while Congress could, in the first instance, define an "intoxicating liquor" that this power was not unlimited; and

While the court has expressed no opinion as to how far Congress could go either on the upward or downward scale of alcoholic content, the question of the upward scale is the question which is the important one for it is this question of liberalization of the Enforcement Act which is securing so much attention.

Mr. Justice Clarke in his dissenting opinion in the Rhode Island case, pointed out that the contentions of the prohibitionists to the effect that Congress could define alcoholic liquors and that the Supreme Court had no right to review the definition, but was bound absolutely by the opinion of Congress in regard thereto, would rise in future cases to plague its authors. He said:

"It does not require the eye of a seer to see contention at the bar of this Court against liberal, paramount, Congressional definition of intoxicating liquors as strenuous and determined as that which we have witnessed over the strict definition of the Volstead Act."

This is the situation that confronts us and I think it is a fair interpretation of the Law to say that *prima facie*, the definition of Congress as to what is or is not intoxicating liquor is binding upon the Supreme Court.

I do not believe, however, that Congress has an unlimited power, but I say that Congress has, within the limits which are not yet clearly defined, the right to determine the percentage of alcohol in beverages that can be sold without violating the 18th Amendment.

To Summarize

I believe

1. That Congress can prohibit the manufacture and sale of any beverage which it defines as "intoxicating liquor."
2. That Congress can prohibit the manufacture and sale of non-intoxicating beverages if, in its opinion, the sale of such non-intoxicating beverages interferes with the enforcement of the statute prohibiting the sale of "intoxicating liquors."
3. That Congress can constitutionally liberalize the present definition of intoxicating liquors to permit the

sale of alcoholic liquors which are not in fact intoxicating.

4. That there are limitations beyond which Congress cannot go on the upward scale in defining the percentage of alcohol in intoxicating liquors. For example, Congress could not by statute permit the sale of alcoholic liquors which are known to be intoxicating, in fact, within the general acceptance of this term.

Just where the limitation of Congressional power is reached in the upward scale is something which cannot be predicted, but it is safe to say that Congress could, to an appreciable extent, increase the alcoholic content of both malt and vinous beverages over that now prescribed by the Volstead Act without in any way violating the provisions of the 18th Amendment.

Discussion

Dr. H. D. Pease: What is the evidence that will be presented to Congress for and against any particular decision as to the amount of alcohol that must be present in a liquor before it becomes intoxicating? This information should come from scientists, physiologists and pathologists and chemists, and they should have the opportunity to pass on a decision of this sort, both scientifically and practically. When we speak of anything being both scientific and practical at the same time, we must merge one into the other. A small amount of alcohol will intoxicate some men while a large amount will not intoxicate some other men. A practical application must be made of a scientific conclusion.

If we begin to study this proposition from a strictly technical standpoint, devoid of all emotionalism, we will find that by applying amounts of alcohol in proper combinations, even naked tissue cells can grow in the presence of large amounts of alcohol. When we come to pass on the ability of other organisms to withstand the presence of alcohol we find they can grow in substantial percentages of alcohol. These microorganisms are not intoxicated while growing in alcohol; they have none of the delirium, the exaltation, or the depression or the other manifestations of the excessive use of alcohol in human beings. They grow in response to stimuli, and fail to grow in resistance to agencies which prevent their growth. Just where we will arrive after beginning such a study I will not attempt to pass upon this evening. But sooner or later the scientist is going to have something to say on this proposition, and we are not going to have a full settlement until he does. If you are in full accord with Nature you can afford to bide your time.

Dr. E. E. Smith: The subject presents a certain parallelism, from the pharmacological point of view, with the question of what constitutes an injurious quantity of a preservative in a food. Some of us will remember that this came under consideration a few years ago and at that time it seemed that in order to justify its existence in food, a preservative must be present in amounts well removed from what would produce an injurious effect, and that small amount must serve some useful and valuable purpose. I was wondering tonight whether the question might not be raised that in order to justify the use of any alcohol at all, if it should not be shown that it serves some purpose different in the quality of its action from that of intoxication. Might it not be that in order to justify the presence of alcohol it must exhibit some quality of action different from that prohibited by the 18th Amendment? That does not exclude alcohol absolutely, for alcohol serves some valuable purposes. Thus, ginger ale may contain 0.5 per cent. alcohol where it serves a useful purpose in the making of that beverage. It contains certain essential oils that depend for their solvent action upon alcohol. Here you have an illustration of an action different in quality which justifies the use of alcohol as not coming under the ban of producing drunkenness, and therefore might be justified. As to the exact amount of alcohol that would produce drunkenness in the average individual, this amount varies. We all know that a relatively small amount under some circumstances will produce this effect, and that a much larger amount under others will not. Unless we are going to make the limit that amount which serves a different quality of action and is at the same time serving some useful purpose, I do not see how we can draw any line at all.

Mr. A. Josephson: I do not know how I am going to break a lance with Colonel Carlin when the last speaker on the legal side did not dare do it. Moreover, the speaker says that the Supreme Court of the United States has decided that the legislative body may pass legislation that if a beverage resembles an intoxicating liquor that it can be prohibited as intoxicating. Therefore, I suppose that if the legislative body should say that water, which resembles gin, is intoxicating, it could not be used for beverage purposes. If the Supreme Court has said that, as a law abiding member of the bar I will have to accept the deci-

sion. It seems strange that this body should so order such a thing, but they did it, I understand, without an opinion.

I do not know that I can say anything in opposition to the Supreme Court of the United States on that point, but I would say one word in opposition to what Dr. Pease stated, that the scientific men would be called upon by Congress to decide if a beverage was intoxicating or not. Col. Carlin said that Congress in its opinion could decide that, and after Congress finds out that in their own opinion they can say that a liquor like water or ginger ale is to be classified as intoxicating, Congress will not call in any scientific men to assist them to decide if these non-intoxicating liquors are intoxicating. They did not do it when they decided on 0.5 per cent., which is arbitrary. But judging from the decision that Congress has a perfect right to amend the Volstead Act and make the alcoholic content 2 per cent. or 2½ per cent., if they decided on a certain percentage above that they might have to call in the scientific men to test out how much they could stand.

Dr. Thomas C. Chalmers: I would like to refer to the action of the House of Delegates of the American Medical Association at their meeting in St. Louis this year, on the liquor question. The Volstead Act provided that a physician must take out a license to prescribe whiskey, and he may only prescribe one pint of whiskey for one individual in ten days. It is a well-known medical fact that those patients who are in the habit of consuming alcohol daily in some form or other, when they get certain diseases such as pneumonia, must be given a commensurate amount of whiskey or the physician will lose his case. There is not a physician in this room who has not had occasion to give much more than one pint of whiskey in much shorter periods than ten days. Therefore, the Volstead Act has forced the physician to break the law or not to treat properly his alcoholic pneumonia, a condition which I find in my practice is increasing very markedly, and among women. In my ward in the hospital the number of alcoholic patients was markedly cut down just after the beginning of Prohibition. But they are now increasing, and we are getting more poison cases, due to poor alcohol, and a large per cent. of them are women who before Prohibition did not drink at all.

This whole question as to whether or not alcohol is a drug was referred to the Committee on Pharmacology, and that committee—a very able one, carefully selected—reported that it be recommended by the American Medical Association to Congress that they pass a modification of the Volstead Act so that the Government shall take over the spirituous liquors, dispense them in sealed containers (containing a medicinal standard content of alcohol), holding 4, 8 and 16 ounces, that they shall be obtainable by the physicians through the druggists upon a proper prescription, and the physicians be under the control and discipline of their State and County societies. I consider that this would be a good move, for it provides that those physicians who sell their prescription blanks can be brought on charges before their County or State societies, and can be by them turned over to the district attorney. You can walk into the average drugstore anywhere in New York and the druggist will carry out the law by handing out an already prepared prescription to the purchaser of whiskey. Personally I have not taken out a license to prescribe alcohol, for I do not think any physician should act as a bar tender.

Mr. R. J. Reese: I am glad to be instructed in the fine points of Prohibition. Some time ago I had occasion to visit a spiritualistic meeting and the medium was trying to help a poor woman, who wished to learn if she could collect some money, and offering her hope and promises until the woman became impatient and said, "What I want to know is, am I going to get it?" That is what we want to know: are we going to get light wine and beer? I think we are going to get it. I think Congress would be glad to modify the Volstead Act and I believe they would do it overnight if they could use the Australian ballot system. I believe the solution will be delegated to the different States and their legislatures. Liquor is intoxicating when it intoxicates; the question will resolve itself into prohibiting and legislating against giving or selling to any individual enough liquor to intoxicate him. The 18th Amendment was passed because people got intoxicated, and it was a national shame and disgrace, and an economic loss. Why can we not have a law passed to this effect that any person who sells or gives liquor to another in sufficient quantities to cause intoxication, that person shall be guilty of a crime?

Dr. John P. Davin: Colonel Carlin says that Congress has the power to determine the alcoholic contents of beverages. Congress has gone further. Congress has decided what is a medicine. The 18th Amendment relates to alcohol for beverage purposes and Congress has put its seal on what alcohol shall be used for sacramental purposes and for medical purposes. What right has Congress to tell me what to prescribe? Who is the best judge of what is best for a patient, Congress or the physician? True, the average member of Congress can tell what is and what is not

intoxicating. Volstead said to me, "Take away the alcohol and everything else in the pharmacopeia is left." I replied, "Take away the spirit and what becomes of the body?" I am advocating a revision of the medical provisions in the Volstead Act because it is often a matter of life and death to a patient to be able or not to take alcohol. The prohibitionists believe it is better to let him die, but a physician hates to see his patient die. If I am to be restricted to prescribing one pint of whiskey for some patients in ten days, I will be responsible for the death of that patient. The serious problem is to arouse interest in securing the medical revision of the Volstead Act. I am not interested, as a medical man, in securing light wines and beers, but I am interested in retaining my right as a physician to prescribe what I consider necessary for my patients' welfare, and that right I shall defend. The medical profession have resigned itself to this as a great moral law, and I cannot interest them in the necessity of securing its revision. If we can get Congress to revise the medical provisions, we will have opportunity to show them what is intoxicating and what is non-intoxicating, and this country would not go to the dogs if it used light wines and beer.

Dr. L. W. Swisohn: Congress will be influenced by the number of votes involved in their decision to amend the 18th Amendment.

Mr. William H. Hirst: This problem has been struggled with for ages and ages without arriving at any solution. I believe that by the enactment of the 18th Amendment and its enforcement law known as the Volstead Act we have created a situation which has given birth to issues which will bring us to sane legislation which will teach the world the proper method of handling the liquor problem. That is, by providing without restriction an alcohol of low degree so that it may come within the meaning of the 18th Amendment which prohibits only intoxicating beverages. The paper of the evening asks "Has Congress the power to determine the alcoholic contents of beverages under the 18th Amendment?" As the speaker has told you, the United States Supreme Court says that it has. In defining "intoxicating liquor" the dictionary has been thrown in the scrap heap and Congress is the lexicon. Whatever our belief as to whether the law should be revised our only hope for relief is in Congressional enactment. Prohibition was enacted as an economic issue and the capitalists, who were instrumental in bringing it about, are now recognizing the menace in what they have done; they have aroused class envy, and that is a dangerous thing, for it applies to other things besides liquor. The economic element will bring about a modification.

As to the restrictions on the medical profession, I do not see why Dr. Davin should not be able to arouse all the interest necessary in his endeavors to bring about a revision of the medical provisions of the Volstead Act. But I do not believe the aim of Congress and the courts is the crippling of the medical profession nor questioning their wisdom in the treatment of their patients, but to prevent their becoming unconsciously *particeps criminis*. Prohibition was not suddenly imposed on the country; it came because the average citizen did not believe it was possible. Now, with the aroused interest in this subject the country is confronted with deciding whether it is going to take a reasonable and practical method of putting into operation the 18th Amendment or opposing its tyrannous course. No branch of society, no profession, no business will get special relief; it will come to all by the disposal of the entire subject, and only in that way.

Dr. Chalmers: I do not believe that Congress has the right to prescribe how much of a drug a physician shall use. We all know how little prohibition there is. I think that is one of the dangers we are up against today; the deliberate breaking of the law by the otherwise self-respecting, as well as by those who are not self-respecting. The law is not enforced and it is a detriment to the general good of the public. I am not a prohibitionist; I believe local option is the best solution, but in making the physician take the place of the bar tender the medical profession has been placed in a light which is wrong, and some correction should be made.

Colonel Carlin: Dr. Smith's point, in regard to preservatives in food, is not applicable to the situation we have here. Congress has only such power as may be delegated to it by the States, and they have never given it the right to say no alcoholic liquor should be sold. That is not what the 18th Amendment says. It says "intoxicating," not "alcoholic" liquors. Outside of that I have no exception to take to any of the statements made this evening. The United States has not the same power the state has—we are living under a dual government—the states have police power; Congress has only delegated power and it has not the power to say any person shall use no food or beverages containing alcohol. In regard to the general subject of prohibition I carefully refrained from making any expression of personal opinion. In a proper time and place I will be glad to tell you what I think of the subject of prohibition and its workings. I confined myself tonight to the legal facts and cannot here express my views as to whether or not prohibition is a good thing.

NOTES ON THE TYPES OF PHYSICAL EXAMINATIONS

ANNA M. RICHARDSON, M.D.,

New York

There come to all general practitioners practical experiences with the various types of examinations diagrammatically represented in last month's *MEDICAL TIMES*. Illustrative cases which have come to me may make clear the special point in each type to which emphasis should be given. The details of examination and treatment are omitted in order that the purposes of the examination may stand out more clearly.

Case I. Examination for Contagion

Margaret M., age 10. While dressing one morning mother noticed rash on her chest and hands, called in to see if she could go to school. Diagnosis, Scabies.

This case took about ten minutes including the examination and the detailed directions for preventing the spread of the condition and clearing it up on Margaret.

Case II. Examination to Detect Defects—1

Mr. T., age 60. Brought a blank from his insurance company to be filled in on the basis of a re-examination. The spaces required an estimation of the condition of his vital organs—heart, lungs, kidneys, etc. He came with the self-righteous sense of getting a duty accomplished, and was interested only in having the form filled out properly.

This case took twenty minutes; would be of statistical value to the insurance company, but was of little service to the insured.

Case III. Examination to Detect Defects—2

Mary M., wanted to enter a gymnasium class and came to find out if it was safe. She also brought a blank to be filled in. She brought with her the report of the previous year. The blank suggested various interests broader than the insurance blank—as, back and feet, sight and hearing. My predecessor in making the examination of the year previous had recorded the back as "good," and the feet as "poor." Mary had always been under medical observation, had had her tonsils out, her eyes accurately refracted and her teeth periodically attended to. Her vital organs were in good condition.

This examination took twenty minutes and by stating wherein the back and feet were poor and showing Mary wherein she was weak, the report was of instructive value to the physical educator who was to direct Mary's gymnasium work.

Case IV. Examination for Purposes of Treatment.

John M., age 12. Fell on ice two days ago and bruised his knee—pain and swelling since. Today has slight headache and feels feverish. Diagnosis—Synovitis of right knee.

This examination took fifteen minutes, including taking of pulse and temperature and careful inquiry into the condition of other parts. The treatment prescribed would doubtless relieve the condition in due time.

Case V. Diagnostic Examination

Mrs. K., age 30. Had suffered from arthritis for several months. She had been examined and treated by various methods without permanent relief. She had come in to me first two weeks previously and now returned to get the reports of the many tests she had undergone during that time. The blood chemistry and Wassermann had been negative, the Mosenthal and the phenolphthalein were also unrevealing. The fluoroscope, except for a general visceroptosis, was negative; the x-ray of the teeth and the culture from the tonsils were also negative. The culture from the cervix, however, showed

streptococcus infection. The conditions were all explained to her and she was referred to a gynecologist for suitable treatment or operation.

To this case I had given much time and thought—had brought to bear all the resources that might throw light on the cause of the distressing joint pains.

Case VI. Health Examination

Mr. S., age 40, changed his job. As a requirement for the new work he came in for a "health examination." He felt all right and could do his work effectively, so did not have much sympathy with the idea. The general physical findings were negative; his heart, lungs, kidneys, all seemed to be functioning well. He was overweight, in the habit of taking daily cathartics, had flat feet and a blood pressure of S160/D110. When questioned more in detail he admitted that he could not eat indiscriminately as in his younger days; that he became fatigued after walking one mile when six used to be easy for him, and that he did not enjoy late evening parties.

Much time had to be spent with Mr. S. to get him to recognize the significance of these lesser symptoms, and know how to regulate his life so as to overcome them—and yet not to direct his attention too closely to his shortcomings. He had to be interested to direct his diet to reduce his weight and at the same time his blood pressure, and also to relieve the constipation; to exercise and gradually strengthen his feet, and increase his vital capacity—and in all ways so to organize his life as to keep himself up to maximum capacity.

This could not be grasped at one visit. He needed to return several times to report progress and gain stimulation.

Of the six cases considered above, the last will require the most resourceful guidance for the first few months. The others may return for various purposes, but the initial contact would in no way be as binding as that in case VI, where it has been possible to enter deeply into the life problems of a man at a time when a little care will markedly increase his efficiency and his pleasure for several years to come.

15 W. 43rd Street.

The Physician's Library

Surgical and Mechanical Treatment of Peripheral Nerves.

By Byron Stookey, M.D., of Columbia University and New York Post-Graduate Medical School and Hospital. With a chapter on Nerve Degeneration and Regeneration by G. Carl Huber, M.D., Professor of Anatomy, University of Michigan. 475 pages with 217 illustrations. Philadelphia and London: W. B. Saunders Company, 1922.

This splendid book containing 21 chapters, is a complete resume of the subject presented in a most thorough and painstaking manner. Building his structure upon the anatomical and physiological connection of the peripheral nerves with the central nervous system, the author has gone on to explain nerve degeneration and regeneration, methods of nerve repair and when and how to operate. He discusses various nerves and how they can be handled surgically, treats of peripheral nerve tumors, and concludes with causalgia and amputation neuroma.

The work gives the principles and methods whose foundations are based on embryology, anatomy, physiology, experimental work and clinical experience, and it may well be considered an authoritative and eminently useful addition to surgical literature.

Diseases of the Skin, by Henry H. Hazen, M.D., Professor of Dermatology in Georgetown and Howard Universities. 608 pages. St. Louis: C. V. Mosby, 1922.

The second edition of this book contains a few diseases not mentioned in the first edition, and goes more deeply into pathology and treatment of syphilis. A feature of the book is the illustrations which are very numerous, instructive, and illustrative of the points brought out in the text.

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The Empire State Senatorship

President Harding recently remarked that the world is not given to rewarding those who serve it, with opportunities for ease and pleasure. Instead, he said, on those who have been tested and found useful it is wont to place yet greater burdens.

This is the reason why Dr. Copeland has been invited to don the toga at Washington.

Unless men of the Copeland type assume such responsibilities our huge and enormously complicated governmental machine tends to function badly. The man who brings character and specialized knowledge to Congress in these days is like quinidine to a fibrillating heart.

At last the late Senator Gallinger will have a worthy successor, for that New England titan was a physician, and as such proved a trusted guide in the framing and passing of laws having medical aspects.

Our experiences with narcotic and prohibition laws have surely convinced us of the advantage of having well informed representatives at Washington to insure sanity in our medical legislation—a few gyroscopes, as it were, to stabilize the whirling dervishes who constantly menace the people.

The Revolt Against Civilization

Lothrop Stoddard has written a book, *The Revolt Against Civilization*, in which practically all his reasonings and conclusions hang upon the intelligence tests employed by our army during the late war.

The world's unrest he ascribes to the unfit, who, with the mediocre, constitute a majority of mankind. "The modern philosophy of the Under-Man is at bottom a mere 'rationalizing' of the emotions of the unadaptable, inferior, and degenerate elements, rebellious against the civilization which irks them and longing to revert to more primitive levels." There is a conflict between biology and bolshevism, the bolshevists being

either atavists or altogether too-forward-looking persons ("misguided superiors"). Heredity determines pretty nearly everything, and environment gets short shrift at the hands of the author, being relegated to limbo along with such ancient errors as the belief in natural equality.

So Mr. Stoddard senses a revolt against our civilization, which latter, however, he does not picture in a very attractive light. If things are as bad as he depicts them to be it is doubtful whether our civilization is worth saving. The picture that he draws of it is worse than a barbarism; it is based upon an ethnical garbage heap, from whose lethal stench no one can wholly escape. Our author sits in an ivory tower, surveying us in god-like fashion, and sampling all the biological stench as the connoisseur that he is.

In Köln, a town of monks and bones

And pavement fanged with murderous stones,

And rags, and hags, and hideous wenches,

I counted two and seventy stench,

All well defined, and several stinks!*

Mr. Stoddard makes some interesting remarks about the mediocre. "Their very lack of initiative renders them natural conservers of whatever they adopt, and they thus act as social ballast and as a brake to prevent the élite from going too fast and getting out of touch with reality. They also usually support the existing social order, and thus tend to oppose revolution." He concedes that in some respects these boneheads have a social value.

If this work is really revelatory it constitutes a formidable attack, outdoing any radical literature of which we have knowledge. And we recommend it to the Rand School as a piquant digest of revolutionary doctrine.

The author's chief grievance appears to be that "the Under-Man has developed a persuasive social philosophy which makes him to-day a potent menace." He is not merely class-conscious but has a philosophy and a programme of action. Mr. Stoddard concedes grievances, but since the Under-Man class is composed of criminals, degenerates, misguided superiors and "tainted geniuses" it must be destroyed. Obviously this puts the Under-Man class upon the defensive and they have begun to forge a few terrifying weapons.

Mr. Stoddard complains that they aim to triumph only by the dictatorship of a ruthless minority, destroying whole classes, and then transforming the remaining population by a long process of intensive propaganda extending perhaps for generations. "What a monstrous doctrine!" he exclaims, and "What a monumental confession of moral bankruptcy! This is the counsel of desperation, not the assurance of victory," which is all rather naive, considering Stoddard's own proposals relative to the disposition that he thinks we should make of the Under-Man. Does not he himself offer a new and ruthless philosophy and programme of action to the scared bourgeoisie?

Says Caliban, in the *Tempest*:

You taught me language and my
profit on't

Is, I know how to curse.

The implicit dismissal of some of the finest minds in the whole category of human idealism as "misguided superiors," and the explicit dismissal of Rousseau and Tolstoy as "tainted geniuses" is unfair and not worthy of a sound thinker. What about the misguidance of superiors who knowingly constitute themselves bulwarks of what Alfred Russel Wallace called the rottenest social order that the world has even known, namely, our own? Why all the fulminations against the "tainted" Utopians and idealists who have attempted to

*Coleridge.

formulate cures for the disease miscalled our civilization? It is these very "tainted" Utopians who have set up a genuine civilization as an ideal and a goal. They are "misguided superiors," forsooth, because they have rejected a sham civilization. We are really at a loss to understand why our author fails to pillory Jesus as an anarchist; this is certainly a discreet omission, though he does attempt to show how the Christian doctrine of the equality of all souls before God has perverted our altruism into an advocacy of good environment as a lever of civilization (p.38).

Waldo Frank has well said that while the average mind accepts docilely what was new and unacceptable yesterday, it revolts against what will be old and accepted tomorrow. Spiritual and intellectual growth depends upon the ability to change one's mind, as Professor James Harvey Robinson has so well emphasized. Some of Mr. Stoddard's superiors now in the saddle are making a sorry mess of post-war European affairs, just as they muddled things before the war. They are in revolt against the civilization of to-morrow. Will not they and the Stoddards have to change their minds about their brand of civilization, or lose caste as superiors themselves?

Let us carry Mr. Stoddard's idea of a defensive and "offensive" Nordic aristocracy a step further, and postulate a master class membership in which would depend upon one's possession of demonstrated creative genius. Under this dispensation the merely intelligent might be relegated to a relatively low plane of social stratification. The passing of intelligence tests would not suffice. Vocational, educational and political success of even more than ordinary degree would not avail. And the dictatorship of the middle-class "propertariat" would pass to the hands of their betters.

Why should the world attempt to rid itself utterly of its Under-Men? Are they not the ones who have done the rough and dirty work of our so-called civilization? Society needs many diverse kinds of people. We agree with Mr. Stoddard that there should be wholesale segregation in farm colonies (only about 10 per cent. of the obviously feeble-minded are now in institutions), but in place of sterilization we think Mr. Stoddard would be more logical if he favored intensive propagation and an increased utilization of the defectives' labor. To such communities, in which the sexes could work out their directed destinies happily and along conventional lines, all our banalities and sentimentalities could be relegated—all the deplorable movies and freak cults. The economic "pickings" would be very rich and child labor, that embarrassment of the Supreme Court, would no longer be needed.

Birth control and sterilization on the wholesale scale advocated by Mr. Stoddard are not practicable. Intensive propagation would constitute a workable and humane programme.

With respect to the Army intelligence tests it may be said that their findings are open to serious doubt, in view of the many poorly trained workers who applied these tests. Mr. Barron C. Watson (*The Outlook*, Aug. 9, 1922) and Dr. Henry G. Webster (*Long Island Medical Journal*, Sept., 1922) have emphasized this doubtful phase of the subject. The former, by the way, is convinced that the proportion of the simple ones of the earth is not much greater on farm or ship or in mine and factory than it is in classic halls. In this connection it would be in order to say something about the stupidity of those who have swallowed the army figures whole, but we shall let the tempting opportunity pass by.

Insofar as the tests in question are faulty by reason of exaggerating the prevalence of feeble-mindedness

the problem in the terms postulated in this editorial is simplified.

We admit that one interesting possibility would reside in our farm-colony idea; that is that the hordes of regimented defectives might be used as military pawns in the great game of economic imperialism now being played with so much zest by the unscrupulous governments of the world. Would they not almost certainly be used to fight the battles of the profit-taking classes? We seem to hear the words of Congressman Walter M. Chandler of New York, speaking in the House on April 15, 1922:

Let us not be deceived by the thought nor be beguiled by the hope that civilization as we now understand it will ever bring lasting peace. History and experience have taught us that civilization at best is but a veneer, and that the slightest scratch will reveal beneath the surface the savage in the man. A pastoral commonwealth with justice and peace for ever seated at the confines of the Nation is a Utopian dream.

But perhaps this very possibility—an intensified use of inferiors by superiors for the purposes of war—will best recommend the plan that we have outlined to our would-be Nordic supermen, possessed as they are by furious fears for their ancient privileges. Their prestige is challenged. Desperate remedies are in order. The suspicion of an inferiority complex must be forcibly allayed, in accordance with hoary tradition and practice. The time grows short, for Mr. Stoddard assures us that the social sterilization of superior stocks is speeding up and that our present racial trend is toward social chaos or a dictatorship. The Catos of the underworld are hurling their dreadful sentence: *delenda est Carthago*! Let public bond issues be floated at once for the new type of farm colonies, the last word in industrial and militarist exploitation. And above all, let us be as ruthless in self defense as our enemies are in the attack vouched for by Mr. Stoddard. All the cant about our glorious civilization, however, ought to be dropped. It is rotten, but it suits us, and we mean to defend it with every means in our power.

So, at least, the Nordic superiors ought to reason, were their logic not faulty and their real motives not veiled and obfuscated by fear and hypocrisy.

Miscellany

CONDUCTED BY ARTHUR C. JACOBSON, M. D.

CONDUCTED BY ARTHUR C. JACOBSON, M.D.
"A Rattling Success"

The automobile is one of the great factors making for the health of the community. The Ford car put this factor at work for the common man. Life in the open has been greatly expanded through the flivver, not alone by reason of road driving, but because of the ease with which whole families are transported to countryside and camp and farm. If it has, on bright Sundays, withdrawn its thousands from some of the insanitary Gothic mausoleums where our fathers were obliged to foregather, it has compensated in terms of health, itself a divine thing. When we come to reckon the forces aiding preventive medicine powerfully to-day we must never forget the flivver; in this respect it is "a rattling success."

Hush! Not So Loud!

"Why not pay the laborer a living wage that would permit him to live and pay for his medical attendance, rather than ask the physician to make up the deficit in so-called charity hospitals and dispensaries?"
—James A. Gardner, M.D., *J. A. M. A.*, Aug. 12, 1922.

(Concluded from page 298)

Medical Service of the Theatre of Operations, by Lt.-Col. M. A. W. Shockley, M.D., U.S.A. 230 pages. Philadelphia: P. Blakiston's Son & Co., 1922.

The author has been a prominent factor in the instruction of medical officers in the Army, being for a considerable period attached to the Service Schools of Ft. Leavenworth.

This little book sets forth much of the information that a medical officer needs in camp, in hospital, on the march, and in active service in the field. It is a pleasure to commend it for the purpose intended.

Endocrine Glands and the Sympathetic System, by P. Lereboullet, et als. Translated by F. Raoul Mason, M.D., of the N. Y. Post-Graduate Hospital and Medical School. 378 pages. Philadelphia and London: J. B. Lippincott & Co., 1922.

We are indebted to Dr. Mason for presenting to the profession a very clear and concise translation of one of the best books on endocrinology we have yet seen. The fact that several physicians of eminence in France have contributed to the work gives it an authoritative standing that the production of one man might not have. The special feature of this translation, if it is proper to pick out one feature, is the dominance of the pathology of the subject. This phase has been very carefully considered. Indeed, the book is built around pathology. To those who are interested in endocrinology, and their number in these days is legion, this book will open up a wide vista of interest.

(Concluded from page 290)

graduate schools. It is reasonably safe to predict that the next few years will see vaccine therapy take its proper place beside serum therapy, and other regular lines of treatment.

When that time comes, and the thousands of young men who are sent annually from the medical schools to take the place of their retiring elders, are thoroughly equipped in the theory and practice of immuno-therapy, we shall see two most welcome things: First, a rapidly decreasing mortality among children and youth from acute infectious diseases, which will still further increase the average span of life from the near end, but shall also see a more gradual but none the less certain falling off in mortality from the chronic ailments of middle and old-age, ailments that had their inception in earlier years, in the form of colds, and terminated in permanent derangement of the vascular system—a cerebral hemorrhage, or some heart or kidney lesion. And thus will the span of life be lengthened from the farther end. And the time may well come when it will be a disgrace for a man to die at sixty, unless by an accident, and when the hale and hearty man of eighty will be as common on the street and in his office as he of sixty is today, and the centenarian will no longer be a curiosity.

And what will become of the ultra conservative? Why, he will still be doing his splendid work in the development and application of the healing art, including immunotherapy. He will be training armies of young men to a higher degree of efficiency in the practice of that art than ever before known. He will be delivering lectures before medical societies at their open meetings, to which the public is invited, and picturing in glowing phrase the wonderful achievements of medicine in recent years, and paying high tribute to the all but superhuman vision, the dauntless spirit and boundless energy which have made these achievements possible. And he will unconsciously be conserving his strength for the last determined stand against the new remedy for the prevention and cure of cancer—when it comes.

Acute Malignant Degenerative Syphilis.

A. Pfeiffer describes three cases. One was of twenty years' standing, and the degeneration of liver was of the acute yellow atrophy type. In the other cases the degeneration affected the kidneys and spinal cord.—(*Deut. Arch. für klin. Med.*, May 5, 1922.)

(Concluded from page 293)

nasal packing, oils, bismuth, peroxide, preparations of iron, tannin, etc., afford ample field for endeavor. One suggestion is offered; too much effort at control may often aggravate rather than relieve the flow.

Thirdly, the danger to the cribriform plate and meningeal involvement from too high and too active disturbance of the bony plate will be admitted by all. This suggestion is offered to eliminate danger;—by inserting flat-bladed cutting forceps of some type in the highest linear point of the vertical plate necessary for correction and easily removing narrow segment clear back to the vanishing thinness of the posterior border, all the field below presents little danger, and remaining parts, even all the vomer ridge, can be quickly removed. The pool of blood in the contained walls does not seriously interfere and a slight counter drainage opposite to working side will remove probabilities of hematoma or isolated mass of clot—which, of course, is prone to become infected in time and vitiate the otherwise successful result.

Fourthly;—septal reconstruction will often be favored by controlling the desire to remove all bone and cartilage. Portions released from the upper or lower attachment and not exerting pressure will be an advantage "in situ." From some operator came this early suggestion, to make a beveled entrance through the cartilage by a moderately sharp spatula, which readily slips along beneath the perichondrium of the opposite side, renders perforation less liable and minimizes the likelihood of linear elevation with crusting at line of incision.

In closing this discussion of course, effect and technique, added emphasis may be laid upon the value of minimizing post operative interference in the field of special surgery. Long continued after treatment can be avoided by skilful procedure.

BIBLIOGRAPHY.

- Beck—Proceedings A. L. R. & O. Society, 1906, p. 58.
Mink—Archiv. for Laryngologie and Rhinologie. Vol. 3, p. 4.
Goodale—Boston Medical and Surgical Journal. Vol. CXXXV, pp. 487-487.
Spicer—Journal of Laryngology. February, 1903, p. 92. Annals A. L. R. & O., vol. XI, p. 750.
Durkee—Proceedings A. L. R. & O. Society, 1910, p. 313.
Cocks—Proceedings A. L. R. & O. Society, 1915, p. 138.
Rosenheim—Proceedings A. L. R. & O. Society, 1911, p. 453.
Ballenger—Diseases of Nose, Throat and Ear.
Mosher—Proceedings A. L. R. & O. Society, 1907, p. 25.
Mullin—Proceedings A. L. R. & O. Society, 1919, p. 72.
Andre—Contribution à l'étude des lymphatiques du nez et des passages nasales. Mère de Paris, 1905.
Annales des Maladies de l'oreille et du larynx. Vol. XXXI, pp. 425-449.

2117 Chestnut St.

New Summer Speech Classes.

Dr. Walter B. Swift conducted four Summer Speech Classes teaching his methods this Summer. The first one started in Salt Lake City, Utah, at the University of Utah, with Mrs. Sarah H. Barber as instructor. The class supplied eight States with teachers of Speech Defect Correction. The second class was started in Boston, Mass., and followed the meeting of the National Education Association. There were three instructors there, and an unusually large clinic of 190 cases. All of the students are now placed in remunerative positions. The third class was located in Washington, D. C. This class had five instructors. No other Summer course has ever had so many different instructors for a class of speech teachers. After hearing all the methods, the whole class adopted the Swift methods exclusively as the ones they are going to employ in the public schools.

Ascites From Inherited Syphilis.

A case of ascites is described which is the third on record of chronic peritonitis evidently due to inherited syphilis. Case improved under antisyphilitic treatment.—(*Arch. Méd. des Enf.*, Paris, May, 1922.)

Correspondence

Some Questions on Christian Science.

To the Editor of THE MEDICAL TIMES:

In your issue of THE MEDICAL TIMES of October, 1922, appears a letter by Charles E. Heitman, Christian Science Committee on Publication, in which he says: "He (Dr. Wilson G. Bailey) no doubt is sincere in attacking that which he conceives to be Christian Science, but he is mistaken in his view, some day, somehow, he will come into a better understanding of this Science of Christianity by means of which the sick, the sinful are being healed of all manner of diseases through an absolute faith, as Mrs. Eddy tells us 'all things are possible to God, a spiritual understanding of Him, an unselfed love' (Science and Health, page i).

Note all ye physicians, how can you disbelieve it, look up Science and Health by Mrs. Eddy, page i. What better proof do you want, it is written by Mrs. Eddy! Allow me to ask the Christian Science Healers: What do you mean by curing a disease that does not exist? For the last thirty-five years I have been trying to understand the so-called teaching of the un-Christian and unscientific healers, and the answer is, Mrs. Eddy says it in page so and so.

How does the healer cure—by suggestion? through hypnotic influence? through prayers? The answer was, No! So I was looking for light in Mrs. Eddy's writing and I found that the fundamental principle in the healing consists *not in healing*, but in denying the existence of disease. That matter does not exist, everything is spirit, that *God, mind and love* is the only thing that exists. And as the Bible says God created everything, including man, and He saw everything was good, so everything remained good, and as disease is bad and not good, it does not exist. Disease is merely an error of the mind, an imagination, and the one that has a broken leg and feels pain is merely an imagination, for matter does not exist, there is no leg to be broken and therefore the pain is an error. This is the principle of the so-called Christian Science healer.

The following reasonable questions asked:

If disease is non-existent, there is nothing to heal?

If disease does not exist, why do you say "to come to better understanding of Christian Science to heal the sick and all manner of diseases"?

If *God, mind and love* is one, how can there be an error of mind?

The answer was, *Mind* with a capital *M* is God—mind with a small *m* is man's mind, and the mind with a small *m* makes an error.

The question was asked, *Mind* with a capital *M* exists only since the English language was composed by men, and before the English language existed there was no *Mind* with a capital *M*. Was there no God before the capital *M* was established?

No answer to this question.

What did Mrs. Eddy discover? He says, on page i of Science and Health: Mrs. Eddy says, "All things are possible to God." Is that saying a discovery? It is plagiarism on her part. In the Bible, Genesis, xviii, II, "Now Abraham and Sarah were old and well stricken in years, it ceased to be with Sarah after the manner of women, 12, Therefore Sarah laughed within herself, saying, After I am waxed old shall I have pleasure, my lord also being old? 13, And the Lord said unto Abraham, Wherefore did Sarah laugh, etc. 14, Is there anything impossible for the Lord?" From time immemorial to the present day every sane person believed it, not alone religious people, even disbelievers in a personal God do admit and must admit that no matter by what name you call the Creator, whether you call it God, Nature, Supreme Being, or by any other name, must admit that whatever power created this way can create any other way. Mrs. Eddy, who claims to base her writings on the Bible to give it a religious aspect, did not know the Bible. Her ridiculous writings are absolutely against the Biblical teachings regarding the healing of the sick. I challenge her followers to read the Bible to prove that I am correct.

The question was asked, If disease does not exist, what is the healer charging for?

Answer—"The laborer is worthy of his hire."

Question—If disease does not exist, there is nothing to heal and therefore there is no labor?

Answer—The Christian Science healer, like members of the medical profession, must maintain suitable offices and homes.

Great heavens! the audacity of such an answer is at par with the Bolshevik doctrines. The medical man spends a lifetime to study real sciences, sacrifices his life and money for the public welfare.

Any washerwoman, a street cleaner or a traveling salesman who can read English, can buy Mrs. Eddy's ridiculous book,

and becomes a healer by declaring there is no disease—and charge for it!

Question—If disease does not exist, what produces "fever in disease?"

Answer—Imagination, the patient imagines he has fever; it is an error of the mind.

Question—In the normal state the body temperature is from 98 to 99 degrees Fahrenheit. In disease the temperature registers in the thermometer from 99 to 106 Fahrenheit. Any sane person sees the column of mercury go up; does the thermometer imagine the mercury is rising?

No answer.

The above questions and answers I asked in writing from chairmen of Publication Committees of the Christian Scientists and the answers were replied in writing.

Let the readers of THE MEDICAL TIMES judge who is sane!

The very name Christian Science signifies insanity.

Christianity is a religion; the fundamental principle of religion is to believe because nothing can be proven in religious beliefs.

In Science, the fundamental principle is *not to believe*; it *must be proven by a test*; when one says it is scientifically proven it means it can be demonstrated to every sane, intelligent mind. For instance, when we say, this is scientifically proven to be gold, it means it was proven by the acid test. Nothing is taken for granted in science.

L. W. ZWISOHN, M.D.

249 W. 122nd Street, New York City.

National Cancer Week.

To the Editor of THE MEDICAL TIMES:

The last year has seen a most encouraging volume of interest in the Cancer Problem.

We think this due in no small part to the 1921 National Cancer Week, held last fall, and the success of that week was largely due, without doubt, to the whole-hearted interest which the American Society for the Control of Cancer received from the authoritative medical and surgical journals of the country and the medical writers constantly contributing to professional periodicals and to the lay press.

At that time, you will remember, it was thought that one could detect evidences of the cancer curve having reached its crest; but since then another increase is noted, the rate for 1920 being 83.4, having risen from 63 per 100,000 population in 1900.

In several States it is reported that mortality from cancer has passed that for tuberculosis and in 1920 for the whole registration area there were more deaths from cancer than from tuberculosis in those 30 years of age and over.

How can we hope to hold this disease within reasonable bounds? It is conceded that there is at present but one hope—more education,—education of the laymen with reference to symptoms and to the groundless fear of the disease and of an operation; and education of the physician to a point where he will no longer temporize but will act immediately and intelligently upon every danger signal which might suggest cancer.

This then the challenge. This the reason, even in the face of the possible cry of "Repetition," that the American Society for the Control of Cancer has set the week of November 12-18 for a second "National Cancer Week," and is now calling once again for all medical journals and medical writers to stand by and push.

Two outstanding contributions were made to the campaign last year: (1) The carrying of announcements of the campaign and the urging of all medical men to take part; and (2) the preparation by several authoritative medical writers associated with syndicates of a daily cancer article for their columns during that "Week." Some excellent symposiums were also carried by the medical and surgical journals. All of these methods are to be encouraged and the Society earnestly requests that all suitable publicity be given the campaign and that instructive material be disseminated both in the professional and lay press to the end that everybody may become intelligently informed with reference to cancer and the movement for its control.

AM. SOC. FOR CONTROL CANCER.

(THE MEDICAL TIMES is heartily in sympathy with the work of the Society and is glad to open its pages for advancing the purposes of the organization.—Ed.)

Ophthalmia Neonatorum.

C. W. Hutt states that of 34,000 blind persons in the United Kingdom one-third owe their blindness to ophthalmia neonatorum. Each blind child costs on an average of one hundred and twenty-five pounds a year to educate and maintain, while twelve pounds a year is the cost of education of the normal public elementary school child. Further loss is reflected in the provision making blind persons eligible for the old age pension at fifty years of age instead of seventy. The author discusses treatment and prevention, and urges compulsory treatment of all newborn infants. —(National Health, July, 1922.)

Diagnosis and Treatment

A Serum for Diabetes.

Experiments in the treatment of diabetes, hitherto regarded as practically incurable, have met with remarkable success, according to reports by officials of the Carnegie Corporation, which has made an appropriation for research work at the Potter Metabolic Laboratory and Clinic in California. The treatment that is being administered has given relief in practically all the cases under observation.

The ravages of the disease have been checked by application of a serum discovered by Canadian physicians working under Dr. J. J. R. Macleod of the University of Toronto. This serum has been used at the Potter laboratory. Thus far relief has been dependent upon constant application of the serum. It is too early, physicians say, to describe the treatment as a "sure cure" for diabetes, for the experiments at the Potter laboratory have been going on for only about eighteen months.

Dr. Henry S. Pritchett, President of the Carnegie Corporation, who recently visited the Potter clinic and observed the experiments there, has made a report on the study and treatment there of diabetes, for incorporation in the annual report of the corporation.

Dr. Potter's metabolic research began at the French Hospital here. He removed to Santa Barbara, Cal., where a metabolic clinic and laboratory was built by public-spirited Californians. The Carnegie Corporation has aided the work by an annual appropriation. Dr. Potter died in 1919, and since then the work has been carried on under the direction of W. D. Sansum.

Intensive studies on the internal secretion of the pancreas had been carried on in the meantime under Dr. Macleod in Canada. It has long been known that some pathology of the pancreas is responsible for diabetes. Dr. F. G. Banting, working under Dr. Macleod, carried on intensive experiments to extract a substance from pancreatic tissues. This substance was first injected into dogs suffering with diabetes. The diabetic symptoms disappeared with the application of the serum, which is known as insulin. Convincing results of the efficacy of the serum were obtained by Dr. Banting in the cases of humans suffering with the disease.

"On account of the admirable facilities in the Potter Metabolic Clinic in Santa Barbara and the opportunity afforded by the close association of laboratory and hospital," Dr. Pritchett's report says, "Dr. Macleod and his associates most generously and kindly communicated to Dr. Sansum and his staff in Santa Barbara such full information as they had and because of the urgent need for such an extract of the pancreas urged their immediate co-operation. With the information thus generously given through Dr. Macleod, the staff of the Potter Metabolic Clinic began strenuous efforts in the isolation of the internal secretion of the pancreas now known as insulin. They were immediately successful and within two months had been able to secure a sufficient amount of insulin to use on nine severe cases of diabetes.

The results have been so convincing that there can be no doubt of the great value of this substance in the treatment of diabetes and it is quite within the possibilities that the discovery may result in the relief and cure of great numbers of people from this scourge. The following cases will illustrate the extraordinary sort of results which have been obtained:

"A patient of 53 years of age was sent to the clinic on the verge of diabetic coma, apparently death within a few days awaited him. Following the administration of insulin he became immediately free from sugar, his diet could be increased to normal and he is rapidly gaining in strength and weight.

A boy of 12 in extreme illness through diabetes became free from sugar after twenty-four hours of treatment with insulin has remained free although his diet has been increased to practically normal. This boy is gaining weight at the rate of half a pound a day and is leading the type of life that any normal active child would lead. By the older dietary methods partial starvation would have been necessary even to prolong life, to say nothing of restoration to health. The results in the other cases have been equally astonishing.

"The problem is of course still in its infancy. Insulin is prepared at present at very great expense. Cheaper methods of production must be devised. A study of the intricate chemistry of the product will undoubtedly add materially to our knowledge of the oxidative processes going on in the body about which practically nothing is known at present. But the great gains seem to be that patients with the use of this new agent will not only be able to be sugar free, but will be able to have normal diets with the strength and health which can come alone from the use of such food.

"The brilliant success which has come from this study and the still more brilliant prospects of the future which it holds out form a source of the greatest encouragement to the trustees of

the corporation that their gifts may, if given with discretion, advance the cause of medical knowledge and thereby increase human happiness and usefulness in the most desirable fashion. Mr. Carnegie had always in mind the desire to 'find the efficient man and enable him to do his work.' Not every research can show the brilliant results which have come out of these investigations, but all patient, long-continued study adds little by little to the sum of knowledge, enriches life, and helps to turn away misfortune.

"Not the least pleasing feature of this investigation lies in the generous and admirable attitude in which two sets of investigators, each of whom has received modest help from the Carnegie Corporation, have co-operated toward their common end. It was a graceful and generous act on the part of Dr. Macleod and his colleagues to put at the service of the Potter Metabolic Clinic the full results of their important researches, but this action is in entire consonance with the spirit and the purpose of true scientific research."—(*New York Times*.)

Insulin Treatment Proves Satisfactory.

Satisfactory progress has been made during the summer in the preparation of insulin, the new remedy for diabetes which was worked out in the Medical Research Laboratories last year by F. G. Banting, Med., '16, and C. H. Best, U. C., '21. Clinical results have also been satisfactory, it being established that the serum will definitely stay the progress of the disease. As yet no patient treated with insulin has died. A special clinic has recently been organized at the General Hospital to study in a detailed scientific manner, the effects of the treatment.

The Medical Research Council of Great Britain has accepted the patents for the manufacture of insulin and will act as sponsor for its distribution in the British Isles.

There has been an interesting controversy regarding the discovery of insulin which by its dissimilarity of motive suggests the dispute which raged in England at the close of the war, on the question of who invented the tank.

Sir William Bayliss wrote an article in the *London Times* in which the opinion was expressed that one so young and comparatively inexperienced in laboratory work as Dr. Banting could not have made this epoch-making discovery, and that the credit must be given to Professor MacLeod. Professor MacLeod replied stating that Sir William Bayliss was in error and that the important part of the discovery, namely the idea of preparing insulin from the pancreas some time after ligaturing the ducts, was entirely due to Dr. Banting.

Dr. Banting then came forward with the statement to the effect that he would not have been able to do anything without the assistance of his laboratory colleague, Mr. Best, and the co-operation of Professor MacLeod.—(*University of Toronto Monthly*, October, 1922.)

Serum Treatment of Anthrax.

Willinsky presents a report on cutaneous anthrax in *Canadian Med. & Surg. Jour.* for May, 1922:

An umbrella maker on February 2, 1922, bought a new safety razor outfit which included a brush. On the seventh day after using same he observed a small painless pimple on his left cheek, just in front of the ear. In two days this pimple broke open and the left side of his face began to swell.

On February 13 at the hospital the entire left side of his face was markedly swollen and of a dark red color. The cervical glands on the left side were very enlarged, but not tender. The edema extended into the mouth, pushing the left tonsil region up against the uvula. In the center of this zone of congestion there was a blackish area about the size of a ten cent piece. Surrounding this central eschar there was a ring of pearly-gray vesicles which had a moist appearance. The entire infected area was not tender to pressure. The temperature was 102, pulse 88, respiration 20. Examination of the other organs was negative. The urine contained a trace of albumen with red blood cells. To any one who has seen cutaneous anthrax this was a classical picture.

Anthrax bacilli were demonstrated on direct smears from the necrotic area and cultural examination next day verified the direct findings.

Aside from moist boracic compresses applied daily to the infected area, anti-anthrax serum (Mulford's) was used as follows:

February 14th,	11 A. M.,	40 c.c. intravenously.
February 14th,	1 P. M.,	60 c.c. intravenously.
February 14th,	6 P. M.,	20 c.c. intramuscularly.
February 14th,	11 P. M.,	20 c.c. intramuscularly.
February 15th,	10 A. M.,	20 c.c. intravenously.
February 15th,	4 P. M.,	20 c.c. subcutaneously.
February 16th,	10 A. M.,	20 c.c. intravenously.
February 16th,	4 P. M.,	20 c.c. subcutaneously.

Total, 220 c.c. within 53 hours.

The edema began to subside within twelve hours after the first injection. The temperature was normal in 24 hours and he was

discharged from the hospital on February 21st, the core of the carbuncle having separated the day previous. He developed no reaction after any of the injections.

In this case the early diagnosis was probably a factor in the satisfactory result; however, the author feels that at least with the cutaneous type of disease, we should place our sole reliance on serum treatment and avoid operative interference.

Of very timely interest in connection with the above is an excellent article by Douglas Symmers (Director of Laboratories, Bellevue and Allied Hospitals), entitled "The Serum Treatment of Anthrax Septicæmia" (*Annals of Surgery*, Vol. LXXV, June, 1922, p. 663), in which he points out that the pustule of cutaneous anthrax frequently heals spontaneously if it is left to its own devices and not subjected to operation or cauterization, either of which may precipitate septicæmia. Anthrax septicæmia, on the other hand, is commonly regarded as a form of infection that is practically always fatal. As a matter of fact, of all the septicæmic diseases, it is the one with which we are best prepared to deal, namely, through the use of immune serum. The literature of medicine contains references to six cases of cutaneous anthrax with bacteriological proof of disseminated infection, in which recovery followed the intravenous use of anti-anthrax serum. A seventh is described in this paper. The same method of treatment would appear to be applicable to the septicæmic forms of pulmonary and intestinal anthrax, although I have not been able to find any reference to its employment in such cases.

After reviewing the six published cases referred to, Symmers proceeds to describe in detail the Bellevue Hospital case which came under his care. It is interesting to note that this case was traced to the use of a new shaving brush and that upon bacteriologic examination virulent anthrax bacilli were cultivated from three others of the lot of ten brushes from which the first had been taken. The patient had first used the brush on a Saturday and was admitted to the hospital the following Tuesday with an anthrax pustule on the left side of the neck.

The patient was immediately given 15 c.c. of anti-anthrax serum at several points under the skin in close proximity to the crater of the pustule. "The next morning, when the blood cultures were found to contain anthrax bacilli, two hundred c.c. of anti-anthrax serum were injected intravenously. The dose was repeated at four-hour intervals on three occasions, making a total of eight hundred c.c. of serum to be administered within the first sixteen hours of treatment. The following morning blood cultures were made on six agar plates and, twenty-four hours later, every one of the plates was sterile. In the meanwhile, pending the result of the blood examination, the patient received an additional three hundred c.c. of serum intravenously in doses of one hundred c.c. every four hours, thus making a total of eleven hundred c.c. in forty hours' time." The patient was discharged on the ninth day cured.

Symmers observes that this is the only occasion he has had to treat a case of anthrax septicæmia, his previous opportunities having been limited to the serum treatment of some thirty odd cases of cutaneous anthrax without generalized infection.

As a result of this experience and in reviewing the work of others who have been called on to act in similar circumstances, Symmers believes that a preliminary intravenous dose of one hundred and fifty or two hundred c.c. of serum, followed by forty c.c. at four or eight-hour intervals, would probably suffice. He thus concludes:

1. Every anthrax lesion of the skin or elsewhere should be tentatively regarded as attended by generalized infection until the result of the blood culture proves the contrary.

2. In no circumstances is it justifiable to tamper with the anthrax pustule—incision, excision, cauterization, or similar treatment is dangerous, and may be followed by anthrax septicæmia. The only permissible form of local treatment consists in the injection at the periphery of the pustule or broken doses of anti-anthrax serum at intervals of four or six hours, each injection not to exceed a total of ten or fifteen c.c. Failing this, it is better to cover the lesion with a bit of sterile gauze to collect the secretions, but otherwise to leave it absolutely alone.

3. The most dependable routine method in the treatment of the anthrax pustule is first to isolate it within a barrier or anti-anthrax serum subcutaneously injected every four hours; second, to inject intravenously, at once, a sterilizing dose of one hundred and fifty or two hundred c.c. of serum, and, third, to supplement this by the intravenous injection of forty c.c. every four or eight hours. If the blood culture is negative at the end of twenty-four hours, the intravenous use of serum may be discontinued, the local injections being kept up until the pustule is free from bacilli, or at least until involution forms occur in the stained films. In anthrax septicæmia, the liberal use of anti-anthrax serum intravenously, if commenced in time, is capable in many instances of sterilizing the blood with astonishing rapidity, and, in septicæmic cases, the routine just outlined may be followed until the blood cultures are negative.

Treatment of Gonorrhea in the Female.

G. V. Frank applies heat to the mucous membrane of the urethra and cervix by the use of a flexible metal sound, heated by electricity to a temperature up to 55°C. The heat induces a healing hyperemia and reduces the vitality of micro-organisms.—(*Zeit. für Geburt. und Gyn.*, Stuttgart, March 4, 1922.)

Preparation and Administration of Arsphenamin and Neoarsphenamin.

Standard instructions for the preparation and intravenous administration of neoarsphenamine and arsphenamine for use by the Medical Departments of the Army, of the Navy, and of the Veterans' Bureau, and by the Public Health Service. Issued July 1, 1922, superceding all previous instructions. Attention is called to the fact that neoarsphenamine is a much less constant and less reliable preparation than arsphenamin. Not only are certain batches of all brands of neoarsphenamin show a tendency to deteriorate with age, but there is also a pronounced irregularity in the therapeutic activity of different batches. Arsphenamin shows a more uniform therapeutic activity, and is probably inherently more potent. The gravity method of injection is recommended. Names of firms licensed by the Treasury Department to manufacture or to import the drugs, are included.—(*Public Health Reports*, August 4, 1922.)

The "Meltzer-Lyon" Test in Gall-Bladder Disease

The "Meltzer-Lyon" test, says Elliott C. Cutler, and Francis C. Newton, is a method proposed for the diagnosis and treatment of biliary pathology. It consists in the instillation of a strong solution of magnesium sulphate in the duodenum by means of a tube, with the hope that this will paralyze the sphincter of Oddi, that this paralysis of the sphincter will be followed by reflex contraction of the gall bladder, thus permitting the collection of specimens of common duct, gall-bladder and liver bile. It is based on the experimental evidence that 25 per cent. magnesium sulphate applied to the intestinal mucosa of a dog causes relaxation of the musculature in that area. Subsequent investigation would seem to show that a solution of magnesium sulphate in the duodenum will relax the common duct sphincter. The test is further based on the assumption, as yet unproven, that with relaxation of the sphincter of Oddi the gall bladder contracts. This latter assumption of the law of contrary innervation is merely the application of a principle already recognized by physiologists and applicable to other parts of the body. The experiments of Doyon and Freese demonstrated the double innervation of the gall bladder, and although their experiments seemed to show that the muscle wall had but little contractile power, the above assumption is very tempting. However, the proof of this hypothesis is wanting.

The clinical performance of the test has been repeatedly described. It consists in the passage of a sterile tube into the first portion of the duodenum. The passage of the tube is aided by various manoeuvres, the most helpful of which is elevation of the hips and keeping the patient on the right side once the tube has reached the stomach. Specimens of gastric and duodenal content are aspirated for study as encountered. When the tip lies in the duodenum a solution of magnesium sulphate varying in concentration from 20 to 40 per cent. and in amount from 50 to 100 cubic centimeters is instilled, the tube pinched off for from 3 to 5 minutes, following which the duodenal content is secured by aspiration or syphonage. The first material recovered is chiefly the magnesium sulphate solution instilled, but this is soon followed by a yellowish fluid increasingly bile-stained. The first bile-colored fluid recovered is naturally the content of the common duct since, when the sphincter of Oddi is paralyzed by the action of magnesium sulphate the positive pressure in the duct forces its content into the duodenum. If later there is a sudden change to a dark brown bile ("B" bile), it is natural to suppose it is from the gall bladder, since if we admit the existence of the law of contrary innervation of gall-bladder and sphincter muscle, the gall-bladder content should now be forced out into the duodenum. The proof of the contention that gall-bladder bile is darker and more concentrated than liver and duct bile is now available in the evidence presented by Rous and McMasters on the concentrating activity of the gall bladder. If no dark bile appears, one may conclude that obstruction or an obliterated gall bladder exists. After such dark bile has run for a time, the color of the bile grows lighter and lighter, and one may suppose that having exhausted the contents of both the common duct and the gall bladder, the bile coming forth is hepatic bile ("C" bile), i.e., bile from the hepatic ducts and its finer tributaries. The specimens obtained must then be studied for their bacteriological, cytological, and chemical content.—(*Surg., Gyn. & Obst.*, Aug., 1922.)

DIGALEN

"Roche"

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WIDELY APPROVED
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*"...oftentimes works
efficaciously in cases
where other prepar-
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failed..."*

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The Management of an Infant's Diet

Malnutrition, Marasmus or Atrophy

Mellin's Food	}	Analysis:	Fat49
4 level tablespoonfuls			Protein	2.28
Skimmed Milk			Carbohydrates	6.59
8 fluidounces			Salts58
Water			Water	90.06
8 fluidounces				<u>100.00</u>

The principal carbohydrate in Mellin's Food is maltose, which seems to be particularly well adapted in the feeding of poorly nourished infants. Marked benefit may be expected by beginning with the above formula and gradually increasing the Mellin's Food until a gain in weight is observed. Relatively large amounts of Mellin's Food may be given, as maltose is immediately available nutrition. The limit of assimilation for maltose is much higher than other sugars, and the reason for increasing this energy-giving carbohydrate is the minimum amount of fat in the diet made necessary from the well-known inability of marasmic infants to digest enough fat to satisfy their nutritive needs.

Mellin's Food Company, Boston, Mass.

Suggested Plans for National Cancer Week, Nov. 12-18, 1922.**1. WRITTEN ARTICLES.**

Everybody knows the power of the printed page. So impressed is the Executive Committee with the educational value of expertly prepared and accurately placed news articles that Mr. Van Ness Harwood, the newspaper man who conducted the Society's publicity last year, has again been employed. A press sheet containing over a dozen short cancer articles will be sent regularly to all the principal newspapers in the United States and Canada. These will, of course, be general articles, and will not take the place of the news articles provided local papers and periodicals by State and local committees. Ask the State Health Department or City Department of Health to take over this publicity for you. Most of them will be glad to contribute this service to the campaign, as was done in many places last year, if they are equipped to do so. Registrars of Vital Statistics will often provide local cancer mortality figures which are far more interesting to your readers than are general statistics.

The obvious channels to be used for written articles are:—

- (a) *Medical and Surgical Journals.*
- (b) *Newspapers.*
- (c) *Other Periodicals*, such as fraternal societies and lodge organs, religious publications, health department bulletins, trade journals and bulletins issued by Chambers of Commerce, churches, labor organizations, welfare societies and any others printed for local distribution.

In this connection placards and posters for display in public buildings, stores, street cars and similar places should be carefully and accurately prepared. That made by the Colorado Committee for Denver Street Railways last year is an excellent example. The Office has sent to State and Provincial Chairmen a few large posters. Another (16" x 22") may be secured from the Society or direct from the National Safety Council, 168 North Michigan Avenue, Chicago, Illinois, at 5 cents each, in lots of one hundred.

2. MOTION PICTURE THEATRES.

- (a) *Showing of Lantern Slides.*

These two slides were prepared and financed through the efforts of Mrs. Samuel Adams Clark for the "Cancer Week" in New York City last fall. They may be purchased from the Society on glass for 16c. each, on mica for 8c. each.

- (b) *Four-Minute Talks.*
- (c) *Distribution of Cancer Leaflets.*
- (d) *The Cancer Film.*

3. SCIENTIFIC AND PUBLIC LECTURES.

- (a) *Scientific and Quasi-scientific Meetings.*
- (b) *Popular Lectures.*
 1. *Churches.*
 2. *Women's Clubs.*
 3. *Fraternal Orders and Lodges.*
 4. *Civic Clubs.*
 5. *Chambers of Commerce.*
 6. *Labor Unions and Trades Councils.*
 7. *Radio Talks.*

SUPPLEMENTARY NOTES**1. Demonstration and Diagnostic Clinics.**

These non-operative clinics used so successfully as a rallying point around which to focus interest in the cancer campaign in Pennsylvania by Dr. Wainwright, are an excellent means of educating both the profession and the public. The principal methods employed for such clinics or "cancer days" are as follows:—

- (a) Appoint a Committee on Arrangements from the various medical societies and groups and hospital authorities in the vicinity.
- (b) Announce the "cancer day" to every medical man in the district (and to the newspapers) and urge them to bring or send any patient upon which they may desire assistance as to diagnosis or treatment.
- (c) Have the clinics conducted and patients demonstrated by prominent and well-qualified out-of-town medical men, if possible.
- (d) Arrange a mass meeting in the evening where the visiting physicians, local nurses and public may have the advantage of hearing the cancer problem discussed by these same cancer authorities and the work of the Society presented by the local chairman or somebody else familiar with it. The "Cancer Week" may also be made the opportunity for interesting the hospitals in establishing permanent cancer clinic hours where patients may come for examination and advice, as is now done at the Columbus Cancer Clinic started by Dr. Andre Crotti, Chairman for Ohio, during last "Cancer Week."

2. Cancer Circulars.

The Society will provide two circulars for general distribution. One allotment (red and black circular), entitled "Danger Sig-

nals That May Mean Cancer," has already gone out to the State Chairmen. More will be available. Additional quantities may be had at 75 cents per thousand. The other, entitled "Vital Facts About Cancer," will also be provided in liberal amounts and additional quantities may be had at \$1.00 per thousand.

The Efficiency of the V. D. Clinic.

Burke concludes that the efficiency of the clinic can be further developed; that some degree of standardization as regards treatment and cure is necessary; that clinic should be more intensively advertised; that some element of compulsion is necessary to ensure attendance until patients are non-infectious; and that there should be special clinics at all docks for the use of sailors only. (*Public Health*, London, February, 1922.)

A Preliminary Report on Sub-Mucous Sphinctotomy in the Treatment of Anal Fissure.

Edward G. Martin, of Detroit, Mich., first recounted to the American Proctologic Society the various forms of treatment for anal ulcer, topical applications, dilatation of the sphincter, and open incision, and then described what he terms sub-mucous sphinctotomy or aseptic incision of the sphincter. He plunges a knife through an iodized area behind the anus, passes it diagonally inward and upward through the inner third of the external and through the internal sphincter at least two thirds of the distance back through the anal canal. With the finger in the anus as a guide, the incision upward is completed, avoiding cutting through into the anus. What few fibres under the anal lining remain in continuity are cared for at the end of the operation by gentle bi-valve dilatation. Before doing this sphinctotomy, all anal pathology is operated on, such as excising indurated areas of the ulcer and cauterizing with 5 per cent. solution of silver nitrate. Acute or recent fissures require no local repair other than application of the silver and the sphinctotomy. The puncture wound in the skin is left open for drainage of blood. The writer then said that he based his experience on forty cases thus treated without infection, and suggested that this technic demonstrated the necessity and possibility of improving the treatment of anal fissure.

Some Factors in the Treatment of Extensive Ano-rectal Fistula.

Lewis J. Hirschman, of Detroit, Mich., said to the American Proctologic Society that every case of extensive ano-rectal fistula must be judged by itself, and a full knowledge obtained of the extent and direction of all ramifications, and of the location of all openings. Stereoscopic X-ray plates, after the injection of bismuth paste, are valuable diagnostic aids; and the use of a soft flexible silver probe and bismuth paste, without roentgenology, is invaluable. The bismuth paste is better than colored solutions, because it acts as a lubricant for the probe, and by its bulk distends the tracts and makes them more palpable. The pliability of the probe makes it possible to twist the ends together and use it as a tractor to facilitate excision. Also the probe is a means of drawing through a steel snare wire to cut through the fistula, except a small portion, surrounded by a silk seton, to preserve the anal contour; this seton being removed when the wound has healed down to it. Excision rather than incision is employed whenever possible, and curetting is useless. Firm packing is never done after operation. The dressing is dichloramides T gauze; and, when bacterial examination shows freedom from infection, secondary suture may be possible. In cases communicating with the bladder, urethra or vagina, preliminary colostomy is often necessary. Either sacral or spinal anaesthesia may often be the method of choice. Ambulatory care is instituted early and the after-care should be attended to personally by the operator. Finally the writer said prevention of fecal incontinence must always be foremost in one's mind, and that its occurrence is unnecessary and proof of unsuccessful treatment of fistula.

A Case of Villous Papilloma of the Rectum.

Harry B. Adams, of Philadelphia, reported to the American Proctologic Society a case in which there was a negative family and personal history, except a hemorrhoid operation twenty-two years before, and in which the present symptoms consisting of constipation and mucoid discharge, but no blood, lasted four months. Examination revealed a large friable villous growth on the posterior rectal wall with an indurated base. After thorough division of the sphincters, the mass prolapsed and was removed and the bleeding controlled with some difficulty. Pathological examination showed the growth to be a papilloma. The indurated base was treated, within the following three weeks, with 300 milligram hours of radium and screenage of silver and rubber. The writer considered this a prophylactic dose, and would have given a much larger one in the presence of frank malignancy. The case has apparently been cured.

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free from preservatives, physiologically standardized.

1 c.c. ampoules surgical, 1/2 c.c. obstetrical. Boxes of six.

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Water-white, stable. In 1-oz. bottles, with cup stopper. Of much service in minor surgery. E.E.N. and T. work.

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As a gargle

As a mouth-wash dentifrice

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The freedom of Listerine from possibility of poisonous effect is a distinct advantage, and especially so when the preparation is prescribed for employment in the home.

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High Blood Pressure.

While it is true that there has been a tendency to over-estimate the findings in cases accompanied by hypertension, the fact cannot be lost sight of that persistent hypertension is in the great majority of cases a danger signal. Not only this, but the proper and intelligent use of the sphygmomanometer enables the careful doctor to determine in many instances the existence of impending trouble, long before such trouble manifests itself by other symptoms. Routine examination of vascular tension, therefore, may be regarded as a valuable prophylactic measure. In the treatment of hypertension great satisfaction has followed the use of Pulvoids Natrium Comp., one of the valuable pharmaceutical specialties put out by The Drug Products Co., Inc. This combination brings about a decided but safe reduction of the blood pressure and maintains the vascular tension at a safe level. It does not produce gastro-intestinal or renal irritation, and its use may be continued for long periods of time if required. In addition to its action upon the vascular system, Pulvoids Natrium Comp. strengthens and sustains the heart. The subject of hypertension, how to interpret it, and how to treat it, has been thoroughly and interestingly covered in a booklet which will be sent free to any physician on request to The Drug Products Co., Inc., 152 Meadow Street, Long Island City, N. Y.

A Perfected Biological Syringe.

We note a little booklet of unusual attractiveness, describing the latest form of perfected biological syringe.

The syringe container for antitoxins, serums, serobacterins, etc., has become such an every-day affair that most of us are prone to overlook the many parts which go to make up the complete syringe. This booklet is, therefore, of interest to all who use and handle biologicals, because it takes up each little part separately and explains in detail what is necessary to make the complete, assembled syringe satisfactory.

If you have not seen this booklet, we would suggest that you send for a copy to H. K. Mulford Company, Philadelphia, as you will find it well worth reading.

Antirabic Immunization by the Family Physician.

When a rabies emergency arises there is no necessity for sending the patient away to a Pasteur Institute nor for interfering with his daily routine of business or home life. He can be treated effectively and with assured safety in his own home or in his physician's office with the Lilly Rabies Vaccine.

The Lilly modification of the original Pasteur antirabic immunization supplies the family physician a living, safe antigen. The doses are standardized and reach the physician fresh, possessing their expected antigenic content and in convenient syringe packages ready for immediate injection.

The Lilly Pasteur treatment has been employed in all parts of the United States for many years. Its use has proven its high immunizing qualities, its reliability and its safety. No complications have been reported. Neither the routine of the treatment nor the effect of the injections interfere in any serious way with the patient's well being and comfort nor with the performance of his daily tasks.

This method has also reduced the mortality expectancy rate in treated cases, based on the statistics of the Pasteur Institutes of the world.

Dr. Blau Goes to Vienna.

Dr. Arthur I. Blau, 348 E. 84th Street, New York City, is about to go to Vienna and Berlin for post graduate work in pediatrics. Upon his return in the summer of 1923, Dr. Blau will limit his practice to that specialty.

Organotherapy in Diabetes.

Unusual attention is being given by the medical profession these days, to the problem of developing an organotherapy for diabetes. Contrary to an impression gained from reading some of the articles, this is not a new subject. The recent "discoveries" really should be called "developments", for a number have been at work on this very problem these many years.

An interesting development of very considerable promise is recently announced by Doctor Henry R. Harrower, who states that he has perfected in his laboratory in Glendale, California, a pluriglandular formula directed at the pancreatic deficiency, which is known to be so important in connection with this disease.

Pan-Secretin Co. (Harrower) is a combination of the extract of the pancreas (rich in the incretory cells), secretin, the well known pancreatic hormone stimulant and tonsillar extract. This new product is worth of the close attention of our readers, for it is rendering efficient service in many serious cases of diabetes.

The Appetiteless Child.

Many children who are apparently well nourished and happy, are exceedingly small feeders, and are apt to cause no little concern to relatives and friends because of lack of appetite. While it is not wise to attach undue importance to such continued anorexia, it is always gratifying to the child's parents if the physician orders something which puts an edge on the appetite. Gude's Pepto-Mangan is the one ideal \mathcal{R} in such cases, as it is exceedingly pleasant in taste, easily taken by the youngest child, and seems to have the special property of increasing the desire for food, without disturbing the stomach, or causing constipation. For older children, Gude's Pepto-Mangan in tablet form is often preferable to the liquid (the medicinal ingredients and therapeutic action being identical) because of its convenience and portability. The dosage should, of course, be regulated by the age and general condition of the child. Samples of either liquid or tablets, together with literature, are obtainable from the manufacturers, M. J. Breitenbach Co., New York.

Comments on Euresol.

Dr. W. A. Pusey, Professor of Dermatology, in the University of Chicago, in his "Principles and Practice of Dermatology," under the chapter of "Dermatitis Seborrheica" writes:

The treatment is entirely local and consists of antiseptics; of these the most useful is sulphur. Resorcin, suggested by Unna and highly recommended by Elliot, is largely used, but in experience is very unreliable. It gives the hair a peculiarly harsh, disagreeable feel and occasionally produces a slight greenish yellow discoloration of the hair so that I have discontinued its use.

Euresol, the mono-acetate of resorcin, a liquid soluble in alcohol or water, is much more satisfactory for use on the scalp than resorcin. A form of it, called Euresol pro capillis, in which its unpleasant odor has been disguised is an agreeable preparation.

The author gives several forms of seborrhea and prescriptions with sulphur, chloral hydrate, and for lesser degrees of dandruff says he frequently uses the formula so highly recommended by C. J. White:

\mathcal{R} Hydrarg. Chlorid Corrosiv.....	gr. viii
Euresol pro Capillis	3 iv
Spirit Formicarum	3 ii
Alcohol 70%, q. s. a.....	0 i

The formic acid gives a disagreeable odor of ants and can be omitted.

Lethargic Encephalitis

J. M. Perret, reports this case. Patient was a white male of twenty-one years, who complained of dizziness. On account of the prostration which he presented, he impressed the writer as a typhoid fever case. Dizziness continued and the throat became congested. He complained of pains in the temporo-mandibular joints. For a month the clinical course was characterized by muscular asthenia, drooping of upper lids, photophobia, opened mouth, mild fever, up to 101° F. by rectum. The somnolence was so marked that he appeared as in coma. Speech was low, slow and slurring, and for days he was unable to articulate at all. During the night he would frequently get restless, moan, and complain of pains in knees and legs. A Kernig's sign and coarse tremor of upper extremities were present. The treatment was symptomatic, x-ray of teeth having shown three abscessed teeth. These were extracted and the removal of these septic foci served to help. Blood culture was negative, as also the Widal and Wassermann, both from blood and spinal fluid. The spinal fluid was under slight pressure, and contained fifteen cells per c.mm., and an increase in globulin and culture was negative. The patient made a perfect recovery.—(*Jour. Nerv. & Ment. Dis.*, July, 1922.)

An Easy Method of Finding Tubercle Bacilli in Sputum

Prof. N. Pane of the Bacteriological Institute at the University of Naples has just published a new method in which a concentration of existing bacilli is obtained without any diminution in their number. The suspected sputum is placed in a sterile salt receptacle, and four times its volume of physiological salt solution added; this is then incubated at 37° C for 24 hours. During this time the mucus and cells are liquefied by the proteolytic enzymes in the sputum. The centrifugalization of the bacteria is by this means rendered easy by the elimination from the liquid of the organic substances which spoil the clearness of the preparation and the tubercle bacilli are readily shown by the Ziehl-Neelsen method.—(*Lancet*, May 27, 1922.)

The control of Rheumatic Pain

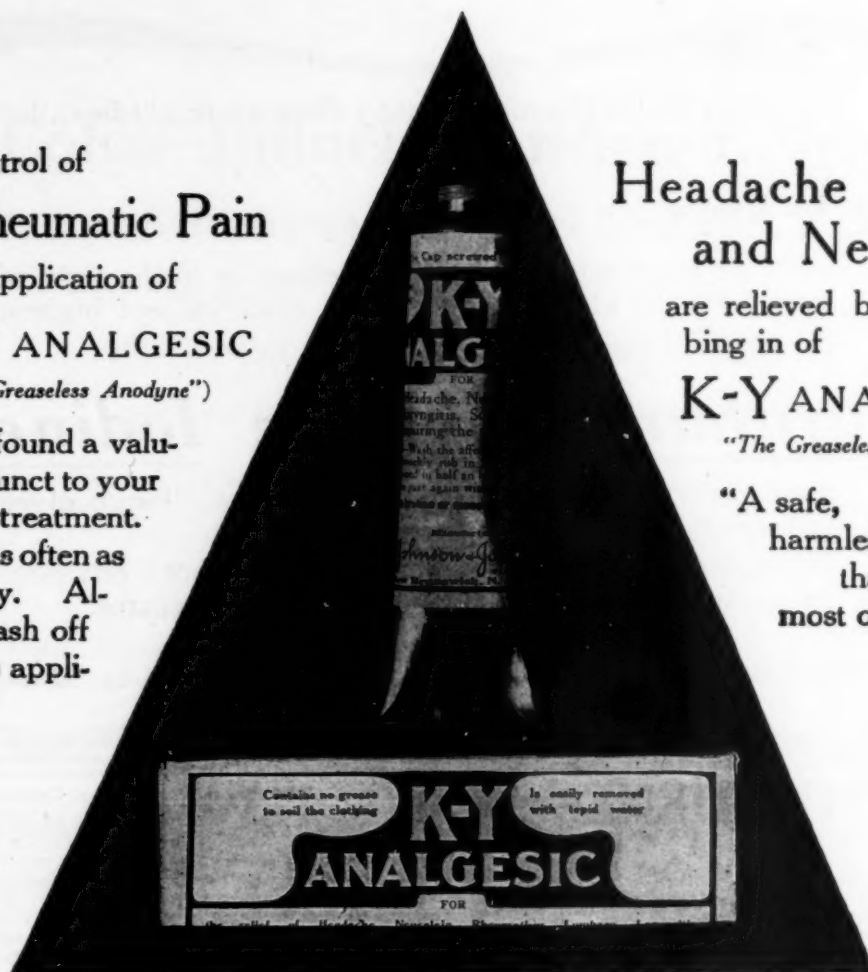
by the application of

K-Y ANALGESIC

("The Greaseless Anodyne")

will be found a valuable adjunct to your internal treatment. Repeat as often as necessary. Always wash off previous application

Samples on request
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Headache and Neuralgia

are relieved by the rubbing in of

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"A safe,
harmless way
that works
most of the time"

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In Your Bag On Your Office Washstand At the Patient's Home

are three places where a bottle of

SYNOL SOAP

should always be kept, assuring yourself of a thorough cleansing of your hands before and after examinations. Synol Soap is antiseptic, cleansing and emollient.

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Effective Surgical Lubrication

is assured by the use of

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Contains no grease, soluble in water, easily removed, does not stain the skin or clothing. Non-irritating, soothing and emollient.

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a product that is effective in many diseases, might be called unfair to the patient.

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of its curative value is equally indefensible in the light of over 20 years of thorough clinical research and highest professional approval.

Burnham's Soluble Iodine

does not irritate the stomach and kidneys, though given in large doses and over continuous periods.

In auto-toxemia of whatever origin, and all septic processes its use means service of the most definite character.

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Syphilis in Women and Children

W. C. Swayne states that the early manifestations of syphilis are not so severe today as they were when he was a student. He stresses the importance of the family doctor. Early diagnosis and continuous treatment are most important, and the co-operation of the family doctor is necessary for any real advance. Clinics should be much more largely consultative for diagnostic purposes and should be used for such treatment as the family doctor feels he is unable to undertake. These remarks apply especially to women, who the author thinks are apt to avoid the publicity of a clinic.

"In women . . . syphilis is more likely to be undetected in its early stages than in the male, and from woman's mode of life it is more likely to be diffused by them extragenitally, to say nothing of the intrauterine transmission of the disease. Diagnosis and efficient treatment is more difficult with women than with men. The class of women liable to diffuse infection is emphatically not the ordinary prostitute. Of the first 100 women I treated, 4 only were prostitutes, 21 were single women, and the remainder married women."

"In regard to the percentages of married women, widows, single women and children respectively who have attended the Bristol clinic, married women and widows show 56 per cent. of the total, single women just over 30 per cent., and children under 15 years of age over 10 per cent. . . ."

"I would call attention to the fact that nearly 20 per cent. of the married women are infected between 40 and 60; it should be noted also that 90 per cent. of the infection among single women occurs below the age of 30."

"Prognosis is difficult especially in answering the question as to when marriage may take place. No patient can be looked upon as cured until she has received a full course of salvarsan substitutes amounting to from 6 to 10 grams spread over a period of several months and accompanied by mercurial treatment, and a negative reaction to the Wassermann test is given on three separate consecutive occasions at intervals of 3 months. For practical purposes this amounts to active treatment lasting over at least 15 months."—(Brit. Med. Jour., September 24, 1921.)

Bichat's canal, Bichat's fat-ball, and Bichat's fissure derive their names from Marie Francois Xavier Bichat (1771-1802), French anatomist and physiologist.—(Med. Facts.)

Colds—Influenza—Rheumatism

Safe Agreeable Salicyl Therapy

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NOVASPIRIN
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Externally

MESOTAN
OR
SPIROSAL

Novaspirin and Salophen are excellently tolerated and free from depression. Being completely tasteless, Salophen is particularly suitable for children, while Novaspirin has the advantage of a higher salicyl content. Spirosal and Mesotan are readily absorbed, as shown by urinary tests, and effectively relieve pain and swelling.

Literature on request

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PLURIGLANDULAR THERAPY IN DIABETES MELLITUS

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After much clinical and laboratory testing we now offer to the medical profession

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An endocrine combination embodying—

- (1) A specially prepared extract of **islets of Langerhans** (pancreas tail), rich in its incretory glycolytic product;
- (2) An acid extract of the duodenal mucosa containing the pancreatic activator, **secretin**, and
- (3) A small dose of desiccated calves **tonsil**.

PAN-SECRETIN CO. (Harrower) is clinically useful in many cases of diabetes mellitus, favoring the reduction of the glycosuria, increasing the dietetic latitude and modifying the deranged endocrine balance.

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A copy will be sent to any physician of record for one dollar postpaid—and it may be returned if desired and both the dollar and the postage will be refunded.

The dose at first is one Sanitab^let t. i. d., later an additional dose is taken at bedtime and still later the amount may be advantageously increased to as much as 2, q. i. d.

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They contain **SEXUAL HORMONES**, i. e., the hormones of the reproductive glands and of the glands of internal secretion.

Special Indications for Testogan:

Sexual infantilism and eunuchoidism in the male. Impotence and sexual weakness. Climacterium virile. Neurasthenia, hypochondria.

Special Indications for Thelygan:

Infantile sterility. Undeveloped mammae, etc. Frigidity. Sexual disturbances in obesity and other metabolic disorders. Climacteric symptoms, amenorrhea, neurasthenia, hypochondria, dysmenorrhea.

Furnished in **TABLETS** for internal use, and in **AMPOULES**, for intragluteal injection. Prices: Testogan and Thelygan Tablets, 40 in a box, \$1.75. Testogan Ampoules, 12 in a box, \$1.80. Thelygan Ampoules, 20 in a box, \$3.00.

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New York

Snake Venom for Serum.

Raymond L. Ditmars, curator of reptiles at the Bronx Zoo, New York, picked up twenty-five copperheads and nine cottonmouth moccasins, October 9, and made them spit into a bottle sufficient venom to kill a hundred human beings.

It is estimated that Dr. Ditmars drew seventy drops of venom from the moccasins. One drop in the vein of a human being would kill that human being in fifteen minutes unless the proper antitoxin were speedily administered. He took about fifty drops from the copperheads. One drop of this would kill as readily as the venom of a moccasin. The yellowish poison will be dried to powder and sent to Dr. Afriano Amaral, head of the Serum Therapy Institute in Brazil, who is conducting experiments at Harvard.

Dr. Amaral is seeking an antitoxin for moccasin and copperhead bites, such as has been found for rattlesnake poison. As the venom of the rattler is converted into a counteracting serum for the bite of the rattler, so they hope to find a cure for copperhead and moccasin poisoning in the venom of these reptiles. Dr. Ditmars declared that it was possible that the experiments now being conducted at Cambridge, Mass., by Dr. Amaral would produce the serum that would offset the poison of the deadliest of all snakes—the king cobra, which takes from 5,000 to 20,000 lives a year in India, Southern China and the Malay Archipelago.

There was nothing submissive about the moccasins. Dr. Ditmars would pin their heads to the table with his stick and take a hard grip, remembering that all either variety of reptile needs is one-eighth of an inch of neck to make it possible to turn and bite the careless hand. Then the moccasins would fight with their thick bodies and heavy, blunt tails. They whipped themselves around the forearm of the curator and thus tried to drag their heads out of the vise. They'd slap their bodies in the air like bull whips and sometimes miss lashing their captors across the face less than an inch. The real excitement among the spectators came when one of the moccasins slid off the table and started West. Toomey got it before it joined the audience.

"Unlike the king cobra," Dr. Ditmars assured the audience, "these snakes will not attack unless angered. It is possible they are more or less angry now, however. These moccasins came from Florida and Louisiana, while we caught these copperheads near by in New York. It takes a snake about a week to store up the amount of venom each of these reptiles has surrendered to-day.

"There is no longer any doubt regarding the efficiency of the antitoxin we obtain from snake venom. We know now that it is 100 per cent. efficient. For example, I have here rattlesnake serum that, if injected into the victim of a rattler's bite within five or six hours after the bite, will assure his complete recovery in a few days. And it is made of the very venom that otherwise would cause the death of the bitten. Of course, if a diamond-back rattler hits any one squarely in a vein—the jugular, for example—nothing will save that person. He or she will die on the spot within fifteen or twenty minutes."—(*New York Herald*.)

Milk in Ocular Therapy

Mazzei gives notes of several cases in which he has made use of subconjunctival injections of milk. He divides his cases into three groups: 1. Conjunctivitis and phlyctenular keratitis. 2. Interstitial keratitis and 3. Vascular trachomatous pannus. Of these three groups, one and three showed great improvement, but group 2, (interstitial keratitis) not only showed no improvement but two of his cases were made distinctly worse by the treatment. He considers that the milk acts as a phlogistic stimulus, activating the local defensive elements. (*Arch. d. Ottal.*, July, August, 1921).

Serums and Vaccines in the Diagnosis and Cure of the Surgical Complications of Gonorrhea

This monograph of more by L. Frassi than a hundred pages with extensive bibliography reviews the available serums and vaccines, their methods of administration, and the results claimed for them, discussing also the theories upon which their production is based. He concludes that gonorrhea is a constitutional disease, in which the organism finds access to blood. Antibodies are found within a few days of infection. Diffusion is by all paths, and susceptibility is increased by all means common in other infections. There is no natural immunity, and the acquired form is transient, passing rapidly into increased susceptibility. None of the diagnostic methods dependent on immunity-reaction is reliable. Vaccines are more efficacious and safer than sera, but in articular complication the latter are worth trial. Vaccines should be polyvalent. (*Arch. ital. di chir.*, 1921, 3, 537).

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Neurosyphilis

Brock gives the details of forty-two cases of neurosyphilis under repeated control of the cerebrospinal fluid for years. The fluid findings returned to normal in one case, with symptoms of spinal meningitis at the posterior roots, under a total course of 4.15 gm. silver salvarsan and sixteen mercurial injections, but, after transient improvement in the clinical picture, symptoms of tabes developed. In such cases treatment had better be with small doses of the arsphenamin, possibly with shorter intervals, to avoid irritating further the spinal tracts already tending to degeneration. (*Med. Klin.*, January 22, 1922).

Medical Services Money Cannot Buy

H. E. Kleinschmidt says the physician, especially the venereal-disease physician, is often confronted with situations which require the utmost tact and consideration, as well as judgment. A number of illustrative cases are given. Dr. Kleinschmidt points out the following guiding principles:

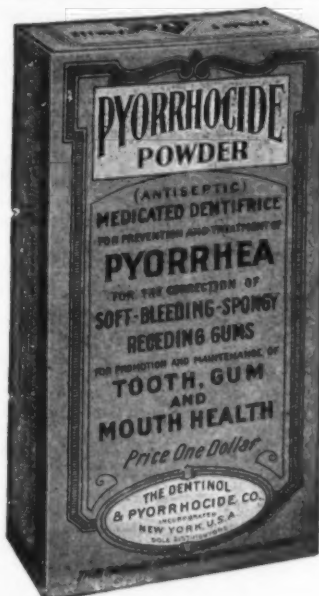
The psychological reaction of the patient should be anticipated and respected. Whereas bluntness may stir one individual into action, it may crush another of more sensitive fibre.

The physician must bear in mind the effects his answers may have on the family and the social relationships of the patient. The right answer involves an understanding of the mental make-up of the patient's relatives as well as himself.

Finally, the physician must always consider the possible effect of his answer on public health. Social obligations are to be considered as well as professional ethics. There is no such thing as a privileged communication when the health of others is endangered. The practice of medicine can be made a commercial enterprise or a profession, according to the motive of the individual physician.—(*Med. Rev. of Rev.*, Feb., 1922.)

The Staining of the Spirochetes in Cover-glass Smears by Silver-Agar Method.

From the Pathological Laboratory of the University of Michigan. Warthin and Starry give full directions for method of staining spirochetes, which is particularly valuable in its application to the clinical diagnosis of syphilis. Authors believe this method the surest and safest. The morphologic details of spirochaeta pallida and of the mouth and smegma organisms so often mistaken for it, are so accentuated that differential diagnosis is made much easier.—(*Jour. Infect. Dis.*, June, 1922.)



FREE A copy of "Causes and Effects of Pyorrhea — Its Treatment and Prevention by the Dentinol and Pyorrhocide Method" mailed on request.

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—Irish Proverb

It's easy to get convincing results from the use of DIONOL in local inflammation.

But it's no credit to the Medical Profession that, out of respect for so-called authority, many an unthinking medical man neglects to give his patient the benefit of the doubt by failing to test clinically some agent which may not have received the cachet of so-called authoritative approval.

A clinical test of DIONOL on a wound, a stubborn leg ulcer, in hemorrhoids, in pneumonia, influenza or any condition dependent upon or accompanied by local inflammation, will convince. Compared with ordinary conventional agents used for the same purpose the superior action and effect of DIONOL is as convincingly conspicuous as a "white horse in a bog."

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Detroit, Mich.

Constitutional Emotional Excitability

A series of cases are communicated by Krueger, in *Ztschr. f. d. ges. Neurol. u. Psychol.*, the symptoms of which consisted in a pathological heightening of emotional excitability, essentially influencing the thought, actions, and entire course of life of the individuals. These cases are examples of the psychopathic constitution and the emotional hyperexcitability here presents an isolated syndrome, in contrast to those diseases where the affective overexcitability is merely one of a complex of symptoms (in neurasthenia, traumatic neuroses, pathological weak-mindedness, epilepsy, etc.). The author considers these types as a separate group to which he gives the name constitutional affective overexcitability. As children these individuals are endowed with good intellectual faculties, but the period of peaceful development and good educational progress is interrupted by more or less frequent outbreaks of extreme temper as reaction often to a minimal external cause. These affective outbreaks, as the environment assumes greater complexity, become more numerous and serious and these children grow into adults who, with exaggerated self-consciousness, absence of all flexibility of the psychic personality, respond to every contact with the environment with strong anger; and when several irritating factors concur they may lose all reasonable self-control. Only in rare cases does the excess of affective excitability, because it is turned in upon itself, or is thwarted in efforts to spend its force on the environment, lead to suicidal tendencies.

Conflicts with the laws and the consequences thereof may finally implant in these individuals a power of inhibition, so that with advancing years the emotional outbreaks decrease. From normal excitement in emotionally toned phases there are unbroken transitions to those conditions which, in the form of affective stupor, have all the signs of a pathological mental disturbance. In the affective stupor two phases may usually be clearly distinguished, the first taking the form of a general rigidity and stupor immediately following the stimulus which brings the affective tension to explosion. This is the pathological picture at the very crest of angry irritation; it lasts only a few seconds, and is followed by the impulsive phase lasting also usually only a few minutes, but in rare cases from a quarter to half an hour, in which the individual may spring at his opponent with inarticulate cries and flushed face, striking angrily in all directions. For the time of the height of the excitement there is full amnesia,

which may be retrograde. Abuse of alcohol may be mentioned as one of the most frequent exogenous causes of affective overexcitability (45 per cent. of the male, 10 per cent. of female cases). Conflicts with the laws are inevitable. The extreme stuporous conditions are under the protection of the law, but acts perpetrated in the second phase of the affective excitement are deemed punishable. Sentences should, however, be imposed which take into consideration the irresponsibility of the individual.—*Jour. Nerv. & Ment. Dis.*, July, 1922.)

Precipitin Reaction in Gonorrheal Discharges

Although reactions are obtained when extracts of discharges from gonorrheal patients are added to the serum of a rabbit immunized with gonococci, similar reactions are frequently encountered with the serums of normal rabbits, says M. F. Kelley. Likewise, extracts of material from the genital organs known not to be infected with the gonococcus, as well as extracts of exudates due to infections by other organisms, give reactions with both antigenococcus serum and normal serum. Attempts to exclude the non-specific factor and thus obtain a specific reaction have failed. The precipitin reaction as recommended by Robinson and Meader (*Jour. Urol.*, Vol. 4, p. 551), is not applicable for the determination of the presence of the gonococcus in discharges from the cervix, urethra, etc.—(*Jour. Inf. Dis.*, page 623, 1922.)

International Health Congress

An international congress for health education will take place in Paris, December 18 to 23, 1922. Doctors and public-health workers, teachers, and all who are interested in moral and social welfare work are invited to attend. The congress will give special consideration to the question of sex education from the point of view of the individual, of the family and of the race, and to the organization of prophylactic sex teaching among both sexes of every class. The program of the congress is divided into five sections: (1) General hygiene; (2) venereal diseases; (3) venereal prophylaxis; (4) sex education; (5) measures to be taken. In this latter section is included for consideration "the rôle of the Red Cross in the organization of health education and health propaganda." Further details may be obtained from the secretary-general of the Congress, M. Emile Weisweiler, 7 rue Mignon, Paris.